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NEW SERIES.

No. 1.

ORIGINAL ESSAYS.

ESSAYS and PAPERS on the WINTER EPIDEMIC of 1812,
1813, 1814, and 1815, in different Parts of the United
States.

PRELIMINARY REMARKS.

We promised (page 227, vol. ii.) to call the attention of our readers again to this interesting subject, if we could obtain new documents on any practical question connected with it. These have been abundantly procured from respectable medical gentlemen; and, to the facts which had previously been embodied, we have now many more of importance to add, not only with respect to the nature of the disease, but to the different forms it has assumed, the various conjectures it has excited on its proximate causes, and probability of re-appearance. We therefore think it our special province to collect our selections from those materials, without which our former statements might be supposed to be incomplete, and from which we presume conclusive inferences from facts must be deduced, and more useful applications opposed to any future epidemic of the kind.

The winter epidemic has, during four successive winters, scourged inland towns and settlements. It is remarkable, that if compared to the yellow fever, we find, as contrasting circumstances, that the latter had mostly prevailed in sea-port towns, or thickly inhabited

places, while the other has raged throughout scattered country habitations and villages; that this was exclusively begotten during cold and humid periods of winter and spring; while the reverse has taken place of the former, which has been active under the agency of summer heats. On the other hand, it is incontrovertible, that however different both epidemics have appeared in diagnosis and symptoms, they have proved equally rapid in their progress, and fatal in their operation, pervading extensive districts and neighbourhoods, and whole families, without distinction of age or sex. During the pestilential havoc, the belief of its contagious nature and importation has, in frequent instances, caused removals, and even a considerable reduction in the value of property. If among our inhabitants, an opinion had not been previously well established, that their health is not to be assailed by strange and unknown diseases during cold weather, God knows but we would have already seen the interposition of legislative provision against some supposed forms of infectious virus. That, and other conjectures, we must be pardoned to mention; one, however, is not to be overlooked; to wit: that as the yellow fever, since its first appearance, in 1793, has prevailed, during ten successive summers, as an epidemic in some of our sea-port towns, it is not improbable that the winter epidemic will as often be renewed under various forms and degrees of malignity. It was in 1811 or 1812 that the last was principally noticed in the northern section of the United States, about nineteen years after the first invasion of the yellow fever. This is a period exactly of a lunar cycle, which contains the whole series of new and full moons to the same days of the month; and of course the same succession of atmospheric causes, no doubt, materially influence the nature and character of epidemical diseases.*

* It is of no material importance to ascertain at which period of a lunar cycle, the same remote cause of one species of epidemic is to take place, and why one is changed into another. It is a fact, however, that the golden number of 1793 was eight; and the same of 1812. Both years have been, therefore, the eighth year of a lunar cycle.

We have already endeavoured to conciliate the opposite, and yet successful modes of treatment which experienced and eminent practitioners have recommended, by stating and explaining how two forms of the epidemic had really existed. One we called the sthenic form; which, like an inflammatory peripneumonia, ushered in all at once with tumultuous symptoms, which required antiphlogistic remedies. The other is an asthenic disease, a peripneumonia notha, an oppressive or overwhelming typhoid state of the respiratory organs, calling for evacuates, and for a stimulant mode of treatment. A third form we suspected had been complex, and had participated of the nature of the two first. From new facts and observations, we are induced to reject such a definition, which implies some contradiction. As it is better to give an unexceptionable name to this hitherto anomalous form, we propose to consider it as a lypothimia, or syncope, and at last an asphyxia of the epidemic. This is a state accessory to any kind of a disease; it rapidly exhausts vitality, and prostrates the powers of circulation; it leaves no time for the evolution of stages and characteristic symptoms to be marked. It is no doubt the necessary effect of the pernicious cause which constitutes an epidemic, concurring with a peculiar state of human constitution to render it immediately fatal. Hence it is, that very sudden deaths are the harbingers, and always precede all pestilences, and other epidemics. Similar, and frequently unaccountable deaths of healthy individuals were heard of, and noticed at the first approach of the yellow fever, and of the malignant spotted (petechial) fever.

This last epidemic has, five or six years ago, spread much terror in our northern districts, and has been the theme of many interesting medical inquiries. We candidly acknowledge, that we supposed it to be altogether different from the winter epidemic, a succeeding distemper, in the same latitudes, and almost in the same countries. In some respects, we have not erred, as the diagnosis of both diseases has unquestionably been different; we find, however, that the characteristic affection of spots, or exanthematous affection of

the skin, by which the northern writers have been led to give it the name of spotted fever, was not prominent in the greater number of cases. Nay, that it did not take place in more than one out of five instances.

From another respectable authority, we are informed, that during the last winter the spotted fever succeeded and became a substitute to the peripneumonia notha. "This disease, says Dr. R. Hazeltine, of Maine, extensively prevailed here in 1812; but then the thoracic viscera were the seat of the affection, and now it is the brain."

Of this intermixture and close succession of both diseases, we have heard from the southern states. We may therefore conclude, that by comparison, through a sufficient range of population and latitudes of North-America, the malignant petechial (spotted) fever, and the peripneumonia notha, have been frequently intermixed and identified by pathological effects, differing only by a determination to the lungs, or in the brain, or on the skin. Why then should we not listen to all our instructive correspondents, notwithstanding the divers names they have been induced to apply to this epidemic? We regret that heretofore we excluded several documents. We will now attend to all, lest we should be led into error. This measure we are aware will prove to be a laborious task; but it will be applied, in the end, to more useful purposes.

We sincerely regret that it has not been in our power to present to the public the documents we have received in the form in which they were published or communicated. Some were offered for insertion in our *Medical Repository*, without alteration or abridgement, and others submitted to editorial revision. But many had already been published in their native districts, in a form best calculated, no doubt, for useful purposes, among living witnesses and sufferers of the epidemic, which must necessarily undergo another form in our pages. We must also avoid useless repetitions and digressions, entirely unconnected with the main points of our inquiry, and attend to questions of immediate public concern, interest, and utility.

Supposing, for instance, that local or empirical remedies have proved successful in various districts, however different from those that have been generally employed; to the plurality of our readers it remains interesting only to judge upon what indications they were judiciously exhibited or recommended. Other local circumstances and ingenious theories, on polemic subjects, introducing matter either in their time or place, could not all be admitted in our pages, nor answer the objects of general instruction.

With these motives, and under these rules in our professional and editorial capacities, we confidently hope, not to merit censure in the arrangements, selections, or brevity of the extracts we have made under the head of the present subject.

PRACTICAL OBSERVATIONS on the WINTER FEVER of the UNITED STATES, and its very peculiar Character. By Dr. JOSEPH COMSTOCK, of East-Greenwich, (R. I.) in a Letter to Commodore PERRY, dated February 22d, 1815.

DEAR SIR,

I Received your letter of the 4th instant, and cannot otherwise than highly venerate the motives from which you took up your pen.

After having so highly distinguished yourself in your country's cause, it cannot be otherwise considered than as a mark of the most benevolent and humane feelings, to interest yourself in behalf of afflicted humanity in a distant section of the union.

You inform me, Sir, that "I will perceive by the newspaper which accompanies this, that the complaint, on which I understand you delivered a very able discourse before the Medical Society, is prevailing in a very alarming degree to the southward;" and then proceed to inquire, "Is this the same disease that was so fatal in South-Kingston, and which you was instrumental in checking?"

That the disease which prevails in the southern states is a modification of the one which has for about nine years past been epidemic in various parts of New-England, and which is now prevalent in this town, and formerly prevailed in South-Kingston, I have not the least doubt.

In the suddenness of the attack; in the tendency to effusion or congestion; in the weakness of the pulse; in the typhoid diathesis; and, finally, in the sudden fatality, there appears to be an exact likeness. And I may observe, that in particular or collateral symptoms, (viz. whether the attack commenced in the throat, head, side, or limbs) this disease has varied very much in different districts of New-England. Although it did not become an epidemic in the northern states until the month of March, 1806, yet it appears to have prevailed in a part of Connecticut and Rhode-Island in the cold winter of 1799;* and I believe that the first account of it upon record in the United States appeared in the *Connecticut Gazette* of May 20th of that year. And it is a circumstance of no small weight with me, as tending to establish the similarity of the disease to the southward, with that to the northward, as well as certain other circumstances, that the death of General WASHINGTON happened in the month of December of the year which I have mentioned; and that he died with an affection of the throat, which proved fatal under the repeated use of the lancet; just as frequent blood-letting at that time, and since, has been highly prejudicial, and frequently fatal, here, in this singular disease.

This, in conjunction with other facts, serves to establish several weighty conclusions; as, *first*, the unity of the period in which the disease first invaded. *Second*, the complaint being aggravated in both sections of the country by blood-letting. *Third*, its being in both places a disease of great malignity and mortality, at a very unusual season of the year, viz. in the winter; the

* This account, which is in our possession, strongly proves the similarity of that disease with the epidemic of these late years; and with great truth Dr. Comstock concludes, "that our climate is subject to sudden and various changes, which materially alter the type of diseases."

greatest number of deaths happening in cold weather, and diminishing at the approach of summer, contrary to most other fevers, and just the reverse of what happens in yellow fever, a disease of hot weather, and which is checked by cold; and which, I may add, requires a very opposite method of cure. *Fourth*, the case of Gen. WASHINGTON shows the tendency of the complaint *there* to affect the throat, from the first, in a greater degree than *here*; yet a slight sore throat is thought by some accurate observers amongst us, to be the most certain sign of the disease; and I have had several cases, in which it put on the form of a malignant sore throat.

It is now proper to observe, that very little uniformity has taken place any where in this very eccentric disease; it has, therefore (by a learned committee, of physicians in Boston*) received the title of *ataxick*† fever; a name expressive of its irregularity, and by which it may properly be called. From different symptoms attending it, it has in different places been called by other names, as *spotted fever*, *pneumonia typhoides*, *typhus fever*, *cold plague*, *malignant pleurisy*, *cholera morbus*, *bilious pleurisy*, *palsy*, *dysentery*, &c. &c. And it is an acknowledged fact, that it has attacked, in almost every shape and form that any human malady ever assumed; among which I may reckon tooth-ache, common cold, or catarrh, sore throat, numbness, pain in one of the fingers, a sensation like the stinging of a bee, sudden blindness, a failure of the senses, loss of the use of the limbs, convulsions, coldness, paleness, and shrinking of the features; and, on the contrary, with fullness of the face, and redness, sometimes with, and sometimes without heat, rheumatism, &c.

Again, it has appeared like pleurisy, like hysteria, like palsy, like mania, and like apoplexy; and has ended in very ugly ulcers in different parts of the body.

Indeed, Sir, in the language of the discourse which you have so handsomely noticed, it seems to combine all the four classes of disease into one, and to have some

* Drs. Warren, Jackson, and Walsh.

† The name of *Ataxique* was first given by Mons. Alibert to malignant fevers of the intermitting type, "les fievres ataxiques intermitentes."

symptoms of the *febrile*, the *nervous*, the *cachectic*, and the *local*. But it is sometimes clear of all these uncommon forms, and attacks like other febrile diseases, with cold chills, head-ache, pain in the back, and languor.

It has a great aptitude to combine with other diseases, and even to modify and alter those of the most stationary kinds, as consumption; which I have often seen attended with some of its symptoms, such as vomiting, hiccups, apthæ, &c. &c. In one case the snoring respiration of apoplexy was accompanied with consciousness, pertinacious vomiting, and ended in convulsions. This very extraordinary case was that of a short fleshy woman, aged fifty-nine years, who was at first the patient of another physician. It has even combined with bodily injuries, and proved fatal to two young men, one of whom had been bruised by a fall from his horse, and the other by fighting.* I saw the latter for the first time, when he was expiring; he was under the care of a physician who had used the treatment so strongly recommended by Dr. Rush, in yellow fever, viz. bleeding, calomel, and jalap. This, among other cases, afforded to me a striking instance of the want of discrimination in the attending physician.

Sometimes a vomiting of thin black matter, resembling soot-water, or rather bilge-water, takes place, early or late, in the disease, and denotes such a tendency to gangrene as leads to an unfavourable prognostic.

With this, and sometimes without it, there are pitch like dejections, and often those of a bottle-green colour; sometimes foaming, as though in a state of active fermentation. I believe, from hence, that in some places it has been denominated a violent bilious fever.

In two of my patients, matters were thrown up by vomiting, exactly resembling blue dye. The same thing is reported by the committee of the Massachusetts Medical Society. More frequently have these been of a green, or bottle-green colour; and in one case of a claret colour. In other cases, again equally violent, especially in the first years of the fever, nothing una-

* A third case is now on hand.

sual was perceived in any of the discharges; and these were the cases which yielded most readily to the stimulant treatment, viz: to bark, wine, opium, and alkohol; because the stomach was in a state to receive them early in the disease. Some other cases required stimulants for the first day or two, because the debility was extreme, and afterwards emetics and cathartics, to cleanse the first passages.

I ought to observe, that morbid matters from the stomach were not always brought up by *spontaneous* vomiting, when they were thrown off; but in the worst cases by *eructation*, or belching; and this I believe is sometimes true of black vomit in yellow fever.

There was a tendency to intestinal hæmorrhages, especially in the year 1810.

I found these cases yield to acetas plumbi in from one to four grains, combined with opium, from one-fourth to a whole grain, when other remedies failed. After checking the hæmorrhage by this medicine, it is necessary, however, to give a cathartic of ol. ricini in a day or two afterwards.

Dark, bloody, and frothy matter, and sometimes small particles of the lungs, were coughed up. The fever was sometimes converted into complete mental derangement; upon the cessation of which the fever returned.

But often many of the above symptoms were not present, and new cases will surprise those best acquainted with it, with new and unheard-of symptoms.

Such a hydra, Sir, is this monster of disease! so that it seems, after maturely deliberating, difficult to find any thing specifically diagnostick, to distinguish it from various other distemperatures. The pulse, however, is the guide of the physician, like the compass to the mariner; and though it may, like the latter, be liable to variations, yet it is the least undeviating of the devious train of attendants, and cannot cease to be our guide without danger of shipwreck. It may not always be quicker than it is in health, which is the case in perhaps all other fevers; and yet it is sometimes extremely quick, even to 130 or 140 in a minute. It may not at first seem much weaker, upon a slight examination, than the pulse

of a person who is able to be about, although it is often very much so. But one thing in all cases is certain, viz. that it is easily compressible, and always void of that *full, high, hard, resisting beat*, which is the plainest indication of inflammatory diseases. The feeling of the flesh also has often something peculiar. It has a soft flabby feel, somewhat like velvet; and if there is much heat, it is of the penetrating prickly kind, instead of giving a burning sensation like the skin in inflammations. The softness of the flesh has been noticed in dissections; the muscular parts having lost their tone, like meat that had been frozen, and suddenly thawed. It is from hence that there is a tendency to those effusions which constitute danger and cause death; and which seems to be in that particular part, as we suppose, in which the loss of energy is greatest. If this be the brain, the consequence of the effusion may be apoplexy, palsy, or convulsions; if in the thorax, symptoms like pleurisy and peripneumonia; if under the skin, spots; if in the throat, swelling, even to strangulation, or a sudden sphacelation; if in the stomach, it may be so abundant as to waste the body with marasmus, accompanied with puking or diarrhoea. But there are other effects, as we suppose, connected with effusions into the first passages, viz. the generation of a particular acrimony, which may give rise to spasmodic affections of the stomach, or any part more distant; and even occasion the most violent symptoms, and death itself, by suddenly closing the passage of the breath, or stopping the motion of the heart. This effect of acrimony in the stomach is illustrated by the well known effect of tartarised antimony in producing spasmodic affections.

That particular form of the disease which affects the lungs, may have its origin from effusions into that viscus, with cough, and bloody expectoration, and perhaps some peculiar symptoms, which may have given rise to the appellation of *lung fever*.

But, Sir, it is difficult to tell exactly the changes which are undergone in particular parts; and the medical art can pretend to no more, in any disease, than to relieve the symptoms which endanger life, and delay recovery. That a disease so variegated in its appearance, should

have led to a variety of opinions, as to the best way of doing this, is no more than must have been reasonably expected.

And here I deem it only necessary to touch upon those points which materially affect the case; for physicians, like all other men, may be allowed to differ with impunity about non-essentials.

There is then one great and important distinction, which appears not to have been much insisted on by medical writers, which is here of the utmost consequence. It is the difference between inflammation and effusion; sometimes termed, and perhaps more properly, congestion, or distention; and in the language of the French, *engorgement*.

The symptoms and appearances of the two states of the system, being very nearly alike externally, (and internally by dissections after death,) are directly opposite to each other in their natures. Inflammation being owing to too much tension in the fibres, and richness of the blood; and effusion, on the contrary, to too great relaxation of the solids, and poverty of the fluids. The indication of cure in the former case, would be to diminish the increased action, by blood-letting; and in the latter case, to add tone and vigour to the solid parts. When, however, these two opposite states of the system are attended with one leading symptom, exactly the same, the great difficulty occurs. A violent pain in the side, for instance, takes place in the true pleurisy, and sometimes in the commencement of the disease of which we are treating, and in typhus fever. The former requires the lancet; the two latter are aggravated by blood-letting, and require emetics, opiates, and epispasties.

Here a very nice case for discrimination occurs, and the pulse must be noticed again and again, with the most scrupulous exactness, before the physician decides. And if he be charged with inconsistency in pursuing a course of treatment directly *opposite*, when the symptoms are the *same*, he may repel the imputation by truly observing, "that although the appearances are so exactly alike, yet the causes are as directly opposite; and, therefore, he may take the more credit to himself, and honour to his profession, which leads him to the true method of cure, when veiled in so much mystery."

I will now enter more particularly upon the mode of cure, founded upon my own experience, in about six hundred cases.

If in detailing this I could promise you, with certainty, that I was giving what might be depended on in all cases for a removal of the malady, I am very sensible how highly I should gratify your philanthropy. But, Sir, human evils are removable only in part, and the seal of imperfection is stamped on all things human.

It is an unpleasant reflection, that publications upon medical subjects are liable to be misunderstood and misapplied, to the injury of mankind.

The treatment of yellow fever by blood-letting has, unhappily, been transferred to other diseases, and it seems used "in every condition of the system." Whether the sick had a full pulse, a strong pulse, a hard pulse, a soft pulse, or an imperceptible pulse; whether he was old or young, male or female; whether he had consumption or dropsy; whether he sweated or was dry; whether he had strength or faintness; whether his blood was buffy or dissolved; whether his pulse was nine in a minute, or one hundred and eighty in a minute; whether he had petechiæ or none—all are to be bled.

We see that here can be no danger of mistake; the danger is of destruction.

I must observe, that my faith is very slight in universal remedies: every case varies a little, and a variation in the treatment should be the consequence.

One universal indication, however, I will allow, which is, *to keep the system as near the standard of health as possible*; which can only be done by adapting medicines to the different stages of it.

1. When the disease affects the *throat*, I have found an emetic to act like a charm, in the speedy reduction of the swelling. This may be followed by calomel from six to eight grains, every two hours, so as to charge the system, and evacuate the bowels; then a decoction of seneka—a blister—bark and wine.

2. If the disease attack with coldness and great prostration of strength, or a long chilly fit, the patient may be put to bed, and blocks, or billets of green wood, thrown into boiling water, and wrapped in cloths, put round him,

till he sweat freely, which is a remedy, in all modes of attack; at the same time, wine may be given, till his strength and warmth are increased, and then laid aside for our other remedies.

3. When there is *nausea* and *vomiting*, emetics may be used until the stomach is cleansed, and warm water thrown up as it is drank, without any tinge; which is the only sure test of an adequate effect; after which an opiate may be given.

4. If the *heat* be considerable, cool drinks, cool air, and sponging the body with cold spirits, may be of advantage.

5. If there be any symptoms of putrefaction, by the blackness of the evacuation, or otherwise, good lively yeast, prepared by a baker; bark, wine, and a decoction of wild indigo, (*sophora* of Linnæus) are the grand remedies.

6. Of *hiccups*. This symptom is abandoned by Dr. Thomas, in his very valuable work, (the Modern Practice of Physic,) as an affection incurable, proceeding, as he takes it for granted, from incipient mortification in the stomach. My experience contradicts this precipitate conclusion; as out of fourteen patients who had this affection, ten have recovered perfect health, and another is now convalescent.

There are four different causes of this symptom. 1. Congestions of bile, phlegm, or other humours in the stomach. 2. Spasm of the diaphragm. 3. Debility. And, 4. Gangrene of the stomach or parts adjacent.

The indication of cure in hiccups from *congestion*, is an emetic of ipecac. from 10 to 16 grains, followed by cathartics of clear mild muriated quicksilver, if the debility be not too great.

If from *spasm*, antispasmodics of the most powerful kinds; as musk and ol. succini in the best vitriolic ether, or in aq. ammo. vol.

If from *debility*, bark, wine, and nourishing diet.

When from incipient *gangrene*, yeast, with bark, wine, and *sophora*,—a blister to the epigastrick region. As a general remedy, honey may be used, and is very much to be depended on in the cure of hiccups. I knew a case cured with it, which withstood every other re-

medy. The form of hickups most to be dreaded in the ataxick fever, is when they alternate with vomiting.

I may now observe, that every symptom of this disease may be relieved by suitable remedies; but one symptom removed, another is ready to assail, as it were from an ambush, when least expected; and that the variations of symptoms are truly surprising. The great utility of periodical publications is evident from this circumstance, and much credit is due to the Hon. Dr. Mitchill, and the other editors of the Medical Repository, for the pains which they have already taken to disseminate correct information upon so interesting a subject.

I will conclude, Sir, with a few general remarks. *First.* The prognosticks of other diseases will not often apply to this. Persons will sometimes be dying with a pulse perfectly regular, and strong as in health; but generally in this case profound stupor, or stertor in the breathing, will point out the danger.

Second. Sometimes no preceding symptoms will denote very great alarm, when a rattling in the throat, or a drawing down of the under jaw in breathing, will announce a speedy dissolution. It has, therefore, been pertinently observed, that this disease is like a dog that bites without barking.

Third. A disposition to scratch the head, I have noticed to be a very unfavourable sign; and this, so far as I know, is peculiar to this disease. Sometimes this itching is over the whole body, without eruption, and the cuticle is abraded by scratching.

Fourth. Claret coloured spots in the cheeks are of bad omen; as is frequent sighing, rolling the eyes, grating the teeth, slight fatuity, groaning much, when no particular distress can be pointed out; tears standing in the eyes, or rolling down the cheeks, without any attempts to wipe them away; unconcernedness about recovery, and saying they feel better, and shall soon be well, when every thing about them denotes the contrary; a violent throbbing of one or all the arteries, a leaden colour of the face, swelling of the abdomen, or of the body generally, the tongue furred on the sides and to the very tip, stretching out the limbs unnaturally, picking or pulling at parts of their own body, plumpness,

and no apparent loss of flesh, a bloated strangulated countenance, thickening of the lips, sallow, yellow, or very pale complexion; and, I may add, constant tenesmus, without any other sign of dysentery.

Fifth. I have known very copious expectoration, even to a pint or upwards in a day, to end favourably, as also a pulse extremely irregular.

As the Medical Society of this State have been so polite as to publish the discourse which I had the honour to read before them, I forbear to further extend my remarks at this time, and conclude by assuring you of my very high respect for yourself and lady.

JOS. COMSTOCK.

From a Communication of Dr. IRA BASCOM, of Granville, Washington County, New-York; as published in the National Intelligencer, Feb. 5th, 1815.

A GREEABLY to your request, I transmit to you some remarks on the pathology and treatment of the epidemic which appeared in the northern section of the United States during the winter of 1812-13. As far as I have been able to learn, it is the same disease which had prevailed in some parts of New-England and New-York, for several years previous, under the various denominations of spotted fever, catarrhal fever, peripneumonia notha, &c.

To describe all the phenomena, in the commencement and progress of this extraordinary disease, would exceed the means of information within my power, or the limits prescribed to a single letter; I shall therefore confine myself principally to cases which came under my more immediate observation.

The disease appears to have been different, in some of its symptoms, from the spotted fever, as described by Huxham, Pringle, Manningham, and others; particularly with respect to the petechiæ, from which the spotted fever has derived its name, and which seldom appeared in this complaint. The lungs, likewise, appear to have been more severely affected than what they

describe, as having generally occurred in the spotted fever.

During the prevalence of this disease, almost every complaint, however slight, appeared to wear somewhat of the same livery. Patients were generally attacked with a cold chill, a sense of oppression at the extremity of the ensiform cartilage, a low, quick pulse, and a great degree of languor throughout the whole system; at first frequently accompanied with little or no pain. Sometimes, however, sickness at the stomach, a severe pain in one side, extending through the thorax, to the clavicle and scapula, together with a very laborious respiration, were among the first symptoms. The cold stage was generally followed by some increase of arterial action; a dull pain in the head, a livid countenance, a soreness across the temples and eye-balls, and the vessels of the adnata turgid with blood. The sickness, vomiting, and head-ache were sometimes severe from the beginning. In the progress of the disease, a violent throbbing of the temporal and carotid arteries, a tinnitus aurium, and subsultus tendinum, sometimes occurred. Some complained neither of heat nor pain, nor anxiety, and appeared to experience no disagreeable symptoms, except extreme weakness, loss of appetite, and want of rest. In some instances a cold sweat, without pain, accompanied with a sense of extreme debility, occurred in the first stages of the complaint; and, where it terminated favourably, these symptoms sometimes continued, without much variation, for two, three, or four weeks.

In other cases, the complaint, though at first exhibiting the appearance of a common catarrh, suddenly assumed the most alarming symptoms; a violent pain most frequently in the right side; a great effusion of mucus in the lungs, streaked with blood; at first florid, but afterwards of a dark brown colour, accompanied with a cough more or less severe.

These are the principal symptoms that occurred within the limits of my own practice; yet others, too numerous to mention, have appeared in various parts of the country. A severe local pain in the extremities, the limbs, the neck, or the back side of the head, has, it is

said, frequently been the first symptom which has announced the approach of the disease. In some instances a torpor and coldness have almost instantly seized upon every part of the system, the pulse has sunk, insensibility supervened, the powers of life given way to the violence of the disease, and death has closed the scene in a very few hours.

Upon no complaint, perhaps, have the opinions of physicians been more diversified, nor the success of different modes of practice more highly extolled. That such a diversity of opinion should exist, respecting a complaint whose violence frequently baffled the efforts of the most skilful, is not at all surprising; nor, when we take into view the different methods of effecting the same purpose, would the practical result of these conflicting opinions, perhaps, be so widely different as we should at first be apt to imagine.

Modes of practice, apparently very opposite, it is certain, may frequently produce the same ultimate effect; and in no complaint, probably, would one uniform mode of practice have been more injudicious than in this. The anomalous symptoms, and those sudden changes peculiar to this disease, seemed to require a correspondent change in the method of treating it. Without entering into a discussion of the comparative advantages either of the stimulating or the depleting plans, or the superiority of the one over the other, it may be sufficient to state the course which I have myself found to be the most successful.

In the most violent cases, where the strength was immediately exhausted, and the powers of life seemed to be giving way to the violence of disease, the most powerful stimulants, both internal and external, were found to be absolutely necessary. As soon as the system was, in some degree, roused from the death-like torpor of the first onset, an emetic was found to be necessary, and this generally succeeded by a cathartic. Where the symptoms were less violent, these were generally given in the first place. If violent, or long continued puking occurred, the emetic was generally omitted; but in these cases moderate doses of ipecacuanha were found to be very serviceable. Immediately after the operation of

the emetic, it became an object to bring on a free perspiration. For this purpose, heat, applied externally, either in the dry or humid way, together with such internal remedies as Dover's powder, or some other similar preparation, were generally sufficient. After evacuating the alimentary canal, anodynes were freely given, as the symptoms seemed to indicate. If local pains continued, particularly in the side, blisters were freely employed. Where effusions in the lungs were either feared, or had already taken place, digitalis, in as large doses as the stomach would bear, together with camphor and opium, were given with the best effects. The steams of warm vinegar impregnated with hemlock, or some aromatic herbs, inhaled into the lungs, were frequently very beneficial. The effusions of blood appearing to arise from a want of venous absorption, digitalis was frequently exhibited, both to prevent and to obviate this effect, as well as to produce a slow pulse. The system was kept from sinking by the whole round of diffusable stimulants, assiduously employed. Some preparation of mercury, generally the mild muriate, was given in alterative doses, till a general ptyalism was produced; and where this effect was seasonably obtained, patients, with suitable care, afterwards almost universally recovered. External applications of tinct. canth. strong solutions of corros. muriate of mercury, in brandy, sinapisms, blisters, &c. were employed through the whole course of the disease, where the severity of the symptoms seemed to require them.

As an increased quantity of bile appeared, in some instances, to exist in the alimentary canal, these effects were obviated, and the bowels kept regular, by frequently exhibiting small doses of rhubarb and columbo. Where the symptoms above described were many of them absent, and all of them less severe, some part, or all of the above remedies, were employed, as the symptoms seemed to indicate. Many other remedies, of less importance, were frequently given for particular purposes, which it is not essential to enumerate. The above remarks, thrown together in haste, exhibit, it is believed, the principal symptoms of the disease, as it appeared in this part of our country, and embrace an outline of that

course of practice which has generally been found to be the most successful. Should they be thought to throw any light upon the nature, and the proper method of combating the disease, which is now desolating your part of the country, you are welcome to make what use of them you please.

From Dr. B. VAUGHAN's Communication published at Hallowell, in Maine, March 26th, 1814; and communicated to the Editors.

On the name of this epidemic Dr. Vaughan remarks, that considerable misapprehension has arisen from the very name of "spotted fever:" for though the word *spotted* is a fair equivalent of the word *petechial*, which learned men frequently apply to this class of fevers; yet spots of a nature to attract notice are often wanting in five cases out of six; and sometimes in a larger proportion. Hence, well informed practitioners of all descriptions are dissatisfied with the name: which ought to be considered not as denoting spots, but only as implying a tendency to spots.

But after overcoming the difficulties arising from a deceitful name, our physicians have still to encounter the yet greater difficulties of a deceitful disease; for as the disease often counterfeits various others, the practitioner is often surprised at seeing death where he had not been taught even to suspect danger. Dr. Elisha North, who has assembled the opinions of many of our northern physicians respecting this disease, assures us (p. 20.) that it may easily be mistaken for at least fourteen others; a fact, which all attentive observers skilled in the subject, more or less confirm.

We shall accordingly increase his list with several other articles; as pleurisy, and other diseases of the chest; nervous head-ache; palpitation of the heart; ear-ache, sometimes followed by discharges from the ear; lethargy; stretched and shining skin, as in dropsy, and stiffened muscles. This disease has also a mode of attack which sometimes resembles that in epilepsy; that

is to say, pain, or a singular sensation, commences in some extreme part of the body, and travels thence in a straight course towards the head. Some practitioners may be inclined to add to the above enumeration of counterfeited diseases, what is called putrid fever; or else a reputed mortification under some particular form: but the writer of these hints has no observations to offer on this head.

This disease derives farther variations, not only from place and from season, but from the patient whom it attacks, as well as from the treatment which is applied to it.

Nor does the embarrassment of the practitioner always terminate even here; for when he looks into this disease for *fever* (according to the usual meaning of that term,) he frequently finds no indication of fever, either in the pulse or the bodily heat of the patient.

Various American writers also on the subject of what is called spotted fever, at one time seemed to consider *aged* persons as excluded from any share in the disease; though later publications admit (what is true in fact,) that *all ages* are open to its attacks. Misled, however, by what was at first advanced on this subject, several gentlemen, otherwise well skilled in their profession, have treated elderly patients seized with our disease, as if they were seized with one of those other diseases, of which our distemper at times wears the mask; and conducting the treatment of the sick party upon this plan, they have used various evacuants, commonly to the great distress of old people, especially in severe cold weather.

Such complicated sources of deception will readily explain the cause of the frequent mortality which has attended this disease, even under those who have been in esteem as good practitioners; especially when the disease has first appeared within their particular circle of observation. Other persons of inferior experience, imposed upon by such embarrassments, commonly follow the example of practice thus set them by persons of reputation. In both cases, the deaths which occur are attributed solely to the virulence of the disease, without any suspicion that there is error in the treatment.

But it is now time to speak of *symptoms*; which will the more easily be accomplished, since we have in effect described a *multitude of these*, as they appear in different patients; who, during the prevalence of our epidemic, are erroneously supposed to be labouring under other diseases, as above enumerated. The following are to be considered as additional leading symptoms. Whenever three or four, and still more, whenever any greater number among these latter symptoms unite in any case, during the prevalence of our epidemic, (for in no case can they all unite,) there our disease is generally present; particularly if joined either by spots, or pimples, or sores. The order in which these *new* symptoms will be given, will in general show their *comparative value*, as evidence, in every question as to the occurrence of this disease. The new symptoms are these. A slight affection of the throat, internal or external, which is sometimes merely a forerunner: a sense of coldness, not usually followed at first by heat, as in most other fevers; and yet not always implying that the patient is cold to the touch of others: a numbness in one or more parts, but often solely on one side: a loss of strength, more than in proportion to the other symptoms: a pulse, commonly at first slow, and then becoming weak and quick, though occasionally it is found strong (perhaps from the nature of the parts affected); but, in general, it is more or less given to fluctuate: a white tongue in the beginning, which may grow darker, especially by mismanagement; an attack sometimes so sudden, as to strike down the patient, whether he be still or in motion: faintings, especially in females: flutterings, sinkings, coldness, and other sensations, which often alarm the patient, at or near the pit of the stomach: pains, sometimes very severe, in various parts, though in many cases confined to one side; these pains being often removeable by external application, though oftener by perspiration; and frequently swiftly changing their places, and particularly moving towards the head, pains and sensations singular by their nature or situation: sickness of the stomach, which is sometimes distressing: a disturbed state of some of the senses, especially of the sight or taste: a frequent absence of thirst: urine in many cases but lit-

the changed stranguy, sometimes even at the beginning: the stools commonly few in number, but sometimes natural throughout: bleedings, which if other circumstances are favourable, are of less moment than in some other fevers: lastly, no fixed periods or stages in the progress of the complaint, and no striking crisis previous to its termination; (distinctions of this kind, if existing in nature, being lost during the treatment.) Such are the *additional* symptoms, which demand the first inquiries of a practitioner; and which, when viewed retrospectively, will serve to characterize the disease. But a part of them are such as belong to the disease only in its *natural* form and progress, before medical treatment has disturbed its character: (for perhaps there is no disease more easily and essentially changed than this, either by good practice or by bad.) The symptoms also, we must remember, particularly regard the winter form of the complaint in country places in a severe climate.

As to the character of the disease, *during winter*, it is naturally neither inflammatory nor putrid; nor is it then often bilious, unless with bilious constitutions. Some of its symptoms, however, demonstrate it to be of a *nervous* description; as others show that it is *malignant*; that is, it has a tendency to spots or to sores, and to concealed dangers, (which is conformable to the medical sense of the word malignant, with the best writers of different nations.) Dissections also have manifested that there occurs in this disease, an irregular distribution of the masses of blood, and also of the red particles within those masses. For the present, however, (and till we understand all that relates to this *state of the blood*) we may adopt the simple, though imperfect name, lately given to this disease, of *malignant nervous fever*. The discontinuance of the name "*spotted fever*" is not merely desirable for the sake of correctness of speech (spots being neither *peculiar* to, nor *constant* in this complaint;) but where this name prevails, the frequent absence of spots leads to doubts as to the existence of the disease. In justice, however, to those who invented the name, or have submitted to its use, we must observe, that in some years the spots are far more frequent than in others; and that at all times they would be more generally found,

if properly looked for, in *different stages of the disease*. To the names "cold plague" and "numb plague," given to this distemper by our country friends, (though in many cases expressive) similar objections occur, and the vague meaning of the term *plague* furnishes a new objection to their use. On the other hand, by keeping the term *nerrous* in view, the practitioner obtains a monitory key for the principal part of his practice; while the term *malignant* will excite attention to the disease on the part of the sick and of their friends, and not diminish the respect due to the practitioner, after the patient shall recover.

We shall now make some detached remarks.

Spots and pimples are of no moment whatever in this disease, when it is well managed; nor are the sores of much more importance as to the general issue, though often troublesome. The latter, therefore, require no *violent evacuations* under the idea of prevention; the flowers of zinc, or other suitable articles, exhibited in a proper form, will commonly suffice for their cure when they occur.

If the disease be contagious, the contagion fortunately so operates, that the humane attendants on the sick scarcely suffer more by it than those who shun their duty in this particular.

We have repeatedly confined our present remarks to the *winter* form of our disease in country situations. But the disease is not confined to the winter. It was first seen by Dr. Page, jun. in some scattered cases in *Hallowell*, in the summer of 1807; after the decline of the inflammatory diseases which had for some years prevailed there. He was immediately aware of the change, especially as he was one of the first to suffer by its attacks in his own person. Many cases, and some very severe ones, appeared in a following summer. But still the disease is most frequent and genuine in cold weather; and has shown itself in *Hallowell* for several winters including the present. The number of cases treated by Dr. Page, jun. or with his privity, has been about 700 in the whole: and no where perhaps has the success on the new plan been greater. As to *places*, the disease seems to be less frequent near the sea: and when it oc-

curs there, it differs in several respects (as it is believed) from the form above described. What may be the variation arising from different modes of living, remains perhaps yet to be observed.

Though we have declined speaking of the methods of *treating* this disease, there is no reason for not attempting to hint at the means of *avoiding* it.

There are *preparatory* measures, however, in which zealous persons, not of the profession, may exert themselves in favour of those who are seriously attacked, to the satisfaction both of the patient and practitioner. The patient may be put to bed under every circumstance which can insure warmth and gentle perspiration. The feet also may be placed for a time in warm water. Teas may be made either from peppermint, spear-mint, penny-royal, ground hemlock, or common hemlock; and given hot. *Strong and fluid* broths, well seasoned, may be taken in the same manner. The patient will *now be ready for medicines*; for how can medicines exert their virtues, when (for want of warmth and circulation) they cannot exert their power within the system to the proper extent?

Strong liquors, taken to excess, cannot *prevent* this disease; for intoxication weakens the body, and deranges the mind and the senses, which circumstances are part of the disease. During the *course* of the disease, however, strong liquors are often beneficial, though given in great quantities; but then it is because they do *not* intoxicate. Such is the insensibility of the patient to liquor, during the height of the disease, that spirits may then in some cases be drank almost like water. To give medical cordials instead of spirits, is giving spirits under another name. Spirits do not produce costiveness like opium, nor occasion strictures like bark; and when hot water is added to them, they excite gentle perspiration; they also supply strength and confidence; they can easily be had of good quality; and their management is sufficiently understood.

Mercury is variously spoken of in this disease. Dr. North omitted it, and lost about one in a hundred of his sick; and Dr. Oliver Fisk, who used it liberally, had about the same success. Others have tried both experi-

ments, and succeeded both ways. But, it is to be observed, that these practitioners, if they used calomel, did it *without joining purgatives to it*, in the early part of the disease; which is an important observation. Where bile is concerned, or the bowels are moved with difficulty, or in other particular exigencies, calomel would be rejected but by few practitioners. Certainly it does no harm in the celebrated mixture used by Dr. Fisk; of calomel, opium, camphor, and ipecacuanha; (for as to antimonials, they do not in general appear to be suited to the disease before us.) But where the use of calomel is at all equivocal, it seems inconsiderate to give it to such an extent as to produce a sore mouth, in a disease in which it often occurs, and becomes critical.

A question now occurs; namely, are there two modes of curing the disease, since we have evidently two modes of practice respecting it? A disease is best cured, when it is cured in a direct manner, and according to its nature.

There is sometimes indeed more than one epidemic; but this is not frequent. Still there is a new point of view in our subject; for in the very same patient, symptoms of different diseases may *follow* each other in quick succession; but if one treatment, with slight variations, answers for the whole occurring in that patient, there has been only *one* disease.

From Notices on a Malignant Febrile Epidemic which has recently prevailed in certain Towns, District of Maine, by R. HAZELTINE, M. D. February 4th, 1815.

EVER since the early part of the year 1810, diseases within my knowledge have assumed circumstances of unusual malignancy: this remark is not exclusively applicable to febrile affections, strictly so called; but also to several genera of the orders Phlegmasiæ, Exanthemata, and Profluvia. At that time I had been concerned in the study and practice of medicine more than twenty years; and had seen as great a variety in the diseased condition of the human system, as perhaps had fallen to the

lot of most country practitioners in the same period of time; but till then, a genuine case of malignant peripneumonia had never come under my eye. This disease, which had hitherto so rarely occurred, now became an occasional visitant; and in 1811, and 1812, particularly the latter year, hardly any complaint so frequently called for attention. The winter and spring of 1812 were very sickly seasons with us; and we most unquestionably had many cases of genuine spotted fever. Indeed, it appeared in all its variety of forms described by authors; but the greatest number of cases was of what Dr. North calls "the second Species of the Fever." And although the disease pretty much disappeared during the summer season; yet it was occasionally met with in one form or another, from that time till the month of June, in the last year; when Dr. CHARLES TRAFTON, of Doughty's-falls, Berwick, had the care of a few patients, who were attacked in a violent manner, and died after a few hours sickness. These cases were of children. The disease now disappeared, till some time in the latter part of October, when Dr. TRAFTON's attention was called to it again.

The most frequent symptoms in adults were as follows: rigors succeeded with preternatural heat; irregular chills and heats; great thirst in some; moderate, or no way unusual in others; inappetency; pain at the stomach; nausea in many cases; vomiting in a few; great distress; jactitation; great confusion of thought, even to delirium in many cases; coma in a few; deep suffusion of countenance; pain in different parts of the head, mostly in the temples, and over the eyes, sometimes almost intolerably severe, threatening distraction; numbness in the head, as the sick expressed themselves; vertigo; numbness, pricking, and other morbid sensations in various parts of the body, but particularly in the limbs; erratic pains in the body and limbs; white, moist, and furred tongue, in a few instances, as if tinged with ink, dark, brown, dry in the middle, moist on the sides; eyes heavy and dull, sometimes brilliant, and of a natural appearance, although other circumstances were very distressing; bowels regular, yet there were many cases in which the disease attacked in the form of cholera; pulse weak, small, irregular, and often intermitting, and in-

creased in frequency; great prostration of strength; and a propensity to sweat. Dr. TRAFTON told me, that he had observed the pains, numbness, &c. to be more frequently complained of on the left side. It has been much more sickly in Berwick than in South-Berwick; in certain parts of the former town, where the sickness prevailed most, there were very few persons that did not complain of some symptom of indisposition. With respect to the number of fatal cases I am not at present prepared to estimate their proportion to the number of the sick; but would just observe, that it was evidently more severe and fatal with children than with adults; and that wherever judicious medical advice was seasonably given, and duly executed, a recovery was very nearly as certain as in almost any epidemical complaint, with which the people have ever been visited in the same degree, as it respects the number of the sick. From the foregoing description of the disease, as it attacks adults, there were many considerable variations; the pulse was sometimes full, regular, and not greatly increased in frequency; the pains, besides being erratic, were often spasmodic like the cramp; there were in some cases great rigidity, immobility, and soreness of the limbs and surface; spasmodic rigidity of the muscles of the lower jaw, and posterior muscles of the neck; the excretion of urine was sometimes increased, but often defective, and stranguous; and the urine itself of a dark colour and turbid; soreness of the mouth and throat, independent of any effect from medicine; and some others. Upon the whole, that we have been visited with what is called "Spotted Fever," there is no room to doubt; and as the disease is so perfectly described by Dr. North, in his "Treatise;" to which I would refer, I need not be more particular.* That the spotted fever belongs to the genus Typhus, there can be no doubt: and that it differs from every other species with which we have ever been acquainted, is equally evident. Without multiplying words upon the subject, if I might be allowed to propose a specific epithet to be annexed to the word typhus,

* For a review of this valuable work, see Med. Rep. vol. xv. page 56-74.

which would convey an idea, most expressive of the character of the disease, I should employ the Latin adjective *variformis*; in technical or nosological language. I should call the spotted fever, *typhus variformis*. That this disease has its foundation in predisposing debility, it is presumed is unquestionable: and it cannot be improper in this place to offer a few hints respecting the cause of this predisposition, though I have not time to be very minute upon the subject. In investigating the remote causes of that species of typhus which has so extensively prevailed in certain parts of the New-England States within a few years past, it will be proper to attend to the following considerations.

It assumed a very great variety of forms in different persons—but it did not differ in this respect from all other epidemical diseases not strictly contagious. In some persons it appeared as a trifling transient indisposition, of only one or two days continuance—while, in others, its attack was sudden, distressing, and alarming, and continued for the space of a week or fortnight, under the form of a mild typhus or synocha. In some it would attack with circumstances of great distress, which, under proper treatment, would almost wholly subside in twenty-four or forty-eight hours; while in others it would commence with symptoms apparently much less alarming, but would carry the patient off, almost before a physician could be called, and within the same space of time. The most constant and striking characteristic by which it differed from all other diseases, and by which it is immediately recognized by any person somewhat acquainted with it, was its singular anomaly—it differed from all other diseases, and yet it assumed, in different subjects, the livery of all—it confounded all nosological distinction, and was in fact a disease, *sui generis*. Yet amidst all this diversity of character, the sagacious pathologist would desery a striking uniformity—he could not but observe that every variety of the disease which met his eye, stood related to every other which came under his notice—and that all the circumstances of the disease, in all its forms, pointed to the same remote, predisposing, and exciting causes.—In all the fatal cases which I saw or heard of, the body

became remarkably spotted, with petechiæ and vibices both before and after death, and a rapid dissolution succeeded. The disease, by some of the faculty, has been simply called typhus—but it varies from all the forms of typhus with which I have ever been acquainted. The same disease extensively prevailed here in 1812—but then the thoracic viscera were the seat of the affection, for the most part—now the brain;—the same essential circumstances then characterized the disease which characterize it now, its locality excepted—and my method of treatment was precisely the same in both instances, except what the difference in the seat of the affection required, and I was equally successful.

1st. I am of the opinion that the scarcity and consequent disuse of common *salt* has had no inconsiderable effect in the production of that debility which predisposes to spotted fever. It is well known that the article salt has been very scarce in certain parts of our country within a few years. The scarcity of salt fish deserves to be named under this head. Owing to the high price of this article, and the difficulty of procuring it, there has been much less of it consumed of late than formerly.

2d. A depraved state of the *cerealia* undoubtedly has had a powerful effect in producing the spotted fever. The occurrence of the disease in Connecticut was long ago attributed to this cause. In the year 1812, the crop of Indian corn in the county of York was hardly worth preserving. It was so poor, that it was often observed by people that it would not fat swine; poultry, in certain cases would not eat it; it did not taste or smell like Indian corn any more than if it were not the same article. But have not other articles of which bread is commonly made, been depraved within a few years? Has not ergot abounded in wheat and rye within a few years past, more than formerly? I suspect it has, owing to wetter and colder summer seasons of late years.* In January, 1814, I obtained from the country, three bushels of wheat in

* Is not this cool state of the atmosphere owing in a considerable degree, to the vast quantities of ice, that overspread the Atlantic ocean to the N. E. as described in Med. Rep. vol. viii. p. 443, vol. x. p. 225—410, and vol. xvi. p. 194—196? Edit.

one parcel, out of which I picked nearly a quart of ergot. Is it not probable that bread made of rye or wheat thus abounding in that article, would produce disease in persons consuming it for a few weeks or months successively?

3d. It is, I think, not to be doubted that the excessive use of ardent spirits has contributed powerfully to the production of spotted fever in certain parts of our country. Who will disbelieve that the daily and constant use of whisky, which has been practised in certain places in Vermont, has produced this disease? But I will venture to risk another opinion, which will startle the Divine and the Moralist. In investigating the causes of disease, the faithful aetiologist will be careful not to lose sight of truth, however the facts which he brings to light may bear on the cause of morals. I do not hesitate to give it as my opinion, that the *disuse* of ardent spirits for two or three years past, has had its share in the production of spotted fever. To convince any one of the correctness of this opinion, I would beg leave to ask, what would be the probable effects of a total disuse of ardent spirits in those families where it has been constantly used in greater or smaller quantities, every day for several years?

4th. I believe there are very few causes which have operated more powerfully in producing that debility of the human body which predisposes to the spotted fever, than the disuse of tea, coffee, and sweetening. Let any one who has paid any attention to the influence of physical causes on the animal body, consider the probable effects of the abstraction of these powerful stimuli, and doubt if he can the production of disease from this cause.

5th. Owing to the high prices of every thing necessary for the support of families; and the very low price of lumber, by which people in this part of the country have formerly, for the most part, procured the means of subsistence; there has been a diminished consumption of animal food, and of various condiments, such as pepper, ginger, &c. In the year 1813, there were, I believe, many instances of whole families subsisting for a long time wholly on vegetables; and these of an inferior

kind. There was more than one instance that year, I believe, of whole families sitting down to a mere "dinner of herbs," in the town of Berwick.

6th. I entertain no doubt that the coldness and humidity of the spring, summer and autumnal seasons of the year just past, have had a share in the production of the prevailing epidemic. I am possessed of facts which go to prove that the seasons just mentioned, were remarkably wet and cool. Vegetation was imperfect, and the fruits of the earth were crude and immature. I shall instance only one article, that is, strawberries: they possessed none of their wonted deliciousness. Many children, and some adults, were made sick by eating them; indeed they seemed to possess some unwholesome qualities!

Additional Notices by the same, March 28th, 1815.

1st. The disease has continued to rage with increased violence and mortality since the date of the former communication; so much so that there is now scarcely a family that has not been visited with sickness: and the number of deaths in this and other towns from the 5th to the 12th inst. inclusive, was greater than had occurred at any former period of the same length of time.

2d. Besides the varieties named in the former communication, the disease has appeared in a few instances, in the form of anasarca, sick head-ache, bilious colic, *felonious* palm of the hand, &c. which, instead of exhibiting their own genuine character, and yielding to the remedies ordinarily successful in such cases, assumed the distinguishing symptoms of the prevailing epidemic, and were cured by the same method which was found successful in the treatment of the fever. Worms of late have become an almost constant concomitant of every case, whether of children or adults; indeed they appear to be a very aggravating circumstance, threatening, by the irritation they occasion, right as it is a rapid exhaustion of the vital powers. This effect it was found necessary to counteract by an immediate recourse to an emetic of ipecac. extensive vesication, and the use of Riverius's solution, together with an infusion of

the *Spigelia*, till a new train of action was excited; and then other vermifuges might be employed with safety and advantage. Within a month or six weeks the pulmonary system has been more affected, with a cough, at least; and epistaxis has spontaneously occurred in a few cases; and it has in every instance proved salutary.

3d. With respect to the remote causes which the writer has assigned in the former communication as productive of the disease; having had some opportunity, and more occasion, arising from some objections which have been made, to examine the validity of his opinions, he is happy to find them confirmed, rather than invalidated. It would be improper to burden a newspaper with a medical sketch of authorities to the point; but the writer hopes that he will be permitted to avail himself of one at least, without incurring the charge of an ostentatious display of medical reading, or of needless prolixity. That eminent physician, and highly celebrated medical philosopher, the illustrious *Sir John Pringle*, more than half a century ago, imputed the disappearance of putrid diseases in Great-Britain, to the increased use of tea, coffee, sugar, &c. But without an appeal to written authority in support of his opinions, the writer is willing to rest the merits of them wholly on facts. He conceives, and believes it will be universally admitted by medical men, that there are no facts better established than that typhus is owing, perhaps always, to direct debility; and that this is always induced by the abstraction of stimuli. In investigating the causes of the febrile affection which has so extensively pervaded the different parts of New-England within a few years past, it is only necessary to inquire what stimuli have been abstracted. The writer believes that the result of this inquiry would prove that they are the articles which were pointed out in the former communication. He is willing to admit, that diminished atmospheric temperature may have a considerable effect in the production of the disease, by debilitating the powers of life (which might effectually be obviated by warm clothing,) and by depraving the vegetable productions, particularly the nutritious articles of which bread is made. Beyond these two instances, he believes the atmosphere

has no influence whatever in the production of the disease, for him whose frame is invigorated by substantial nutritious diet, warm dress, and hardy exercise.

Dr. Ennals Martin, of Easton, Maryland; Dr. Trent, of Richmond; Dr. Hereford, of Middlebury; and Dr. Scott, of Lunenburg, Virginia; Dr. E. S. Davies, of Milledgeville, Georgia; and others, on this subject, shall appear in our next number.

OBSERVATIONS on the Disease which prevailed in the Army at Camp Terre-aux-Bœufs, in June, July, and August, of the Year 1809. By JABEZ W. HEUSTIS, M. D. late Surgeon in the Army of the United States, &c.

The disease of which the following narrative treats, was noticed in our 14th vol. page 85, together with a report thereon, made by order of the House of Representatives in Congress. The Editors could not at that time, procure a sufficiently detailed and authentic account of one of the most destructive epidemics which has ever been recorded. They now avail themselves of the following, drawn by an intelligent observer; than whom none has better discriminated the pernicious cause that could compose a disease which partook of Eastern pestilence and of inveterate scurvy. However shocking and distressing be the picture of an accidental or occasional epidemic in our own country, it cannot fail to excite much interest, and diffuse that useful knowledge which is the best shield to guard against unexpected calamities. We tender our thanks to our medical contributor. He deserved well when professionally engaged on that memorable spot of warlike and epidemical destruction, the Terre-aux-Bœufs, but still more so, by employing his talents and industry in inquiring into the causes and remedies of the latter.

THIS disease first made its appearance among the soldiers in the form of an intermitting fever, which, by degrees, assumed a more malignant aspect, acquiring the character of the bilious remitting, or yellow fever; becoming more malignant as the season advanced, and

the heat increased. In some instances this fever was of a violent inflammatory character; in others, typhoid symptoms marked both its invasion and progress. In different patients it was of different duration, from one day to a week. It did not appear to observe any particular crisis, and in by far the majority of instances death was the only outlet to the disease.

At length the men were infected with a most violent and fatal dysentery: so sudden and severe was the attack, that the centinels upon duty were, in a short time, so much exhausted by its violence and severity, as to be under the necessity of being carried to their quarters, where, after languishing a day or two, they expired.

In this manner many patients were destroyed by the disease. But such was the prevalence of the dysentery, that whatever form the disease assumed, it was universally connected with the other symptoms of the reigning malady.

Sometimes death was sudden and without any previous symptoms of indisposition. But many who were bled immediately upon falling, recovered. A lad, about 16 years of age, who acted as a waiter to one of the officers, remarkable for his activity, one morning, while preparing breakfast, as he was running to the kitchen, fell down suddenly, prostrate on the ground, as if he had stumbled; when, from his present state of stupefaction, he had in some degree recovered, he seemed no longer conscious of his situation, his countenance was wild and distracted; and his eyes remained wide open and staring. He continued in this state about two days without receiving any benefit from the remedies employed; then fell a victim to the inevitable fatality of the disease. Those patients who survived this sudden attack, were afterwards affected by a violent fever.

Towards the end of July the epidemic malady appeared among the troops in a new form, of such an anomalous aspect, as at first to occasion doubts as to its nature. At length, however, from the general symptoms, composed with such as by former authors had been considered as constituting scurvy, the disease was generally admitted to be of the scorbutic character.

For some days previous to the appearance of the cha-

characteristic marks of this disease, the patients became dull, inactive, and averse to motion; their countenances lost their usual vivacity; the features became sad and dejected, and the face assumed a sallow hue. These symptoms became more conspicuous as the disease advanced; their joints were stiff, and the tendons in the arms rigid and contracted.

The symptoms were succeeded by a pain in the parotid glands. This was attended with swelling and inflammation in the parts, which rarely, however, proceeded to suppuration.

Besides the enlargement of the parotid glands, buboes were formed in the groin; and the maxillary, cervical, and axillary glands, were also affected with swelling. Petechiæ made their appearance in some patients.

In the advanced stage of the disease, motion was insupportable to the patient.

The gums became lax, spongy, enlarged, livid, and subject to bleeding; the teeth being deprived of their natural support, became loose, so that the patients would pick them from their mouth with their fingers, as if they had no further occasion for their use.

Mortification at length attacked the inside of the cheek, which soon made its appearance on the outside, by a small livid or purple spot: when the disease had advanced thus far, it became exceedingly rapid in its progress; the mortification continuing to spread, destroying the whole inside of the mouth in twelve hours, and frequently in less than half that time; the breath remaining horribly fœtid.

No sooner did mortification make its appearance, than the patient surrendered himself a victim to death; despair sat depicted in his countenance; and the unfortunate fugitive, whom exemplary severity condemns to expiate his offence by the sacrifice of his life to his unpatriotic and unmilitary conduct, kneeling on his coffin to receive the execution of his sentence, might be comparatively considered in a more hopeful situation, than the unhappy victim of this mortal malady.

Mortification was not confined to the cheeks alone, but committed its ravages upon the throat and the whole inside of the mouth. One man in particular afforded

a remarkable example of this kind, in whom the mortification had proceeded so far, that, taking hold of his tongue, he deliberately drew it from his mouth, and threw it on the table, for the contemplation of his companions.

The jaws of several patients became carious, and in some instances the lower jaw was detached from its natural connexions by the mortification, and fell from the head in a state of putrefaction. In some patients the head swelled to an astonishing size, as if inflated by the foetid gases, escaping from the decomposing matter. Contrary to what usually happens in the sea scurvy, this disease was attended with a diarrhœa or dysentery.

In some, the skin was smooth, shining, and affected with some degree of tumefaction; in others small red and purple spots appeared upon the surface of the body. Many patients were covered with a scurvy, and pustular eruption, bearing a resemblance to the itch in its most aggravated form. The fingers swelled, with scabs and pimples, and became rigid and inflexible.

The least scratch upon the body degenerated into an ill-conditioned phagedenic ulcer, discharging a bloody purulent sanies.

Such was the commencement and progress of this destructive malady, by which, of 2000 troops that were encamped at Terre-aux-Bœufs, 1000 fell a sacrifice to its ravages. This place of their first encampment, however, was not the only scene of their destruction. One hundred and fifty were destroyed at Terre-aux-Bœufs, two hundred and fifty upon their passage up the river to Washington, and about six hundred while stationed at the latter place. But from a consideration of the several circumstances connected with the origin of this disease, it will appear evident, that the source of its mortality was derived from the place where the troops were first encamped.

Here it may not be improper to subjoin a few examples, bearing an analogy to this disease, by which its nature and character may be more clearly ascertained.

In a letter from Dr. John Cook, physician at Hamilton, giving an account of the scurvy in Russia, Tartary, &c. we have the following remarkable passage, as quoted by Dr. Lind.

“The garrison soldiers, consisting of between six and seven thousand, are most miserably lodged. The walls of their ill constructed barracks are continually moist and warm. At Riga, in the year 1749 and 1750, but especially in the year 1751, the scurvy raged with the utmost violence. It broke out in the month of February that year. Here I saw the most dreadful spectacle that I ever beheld. Their gums mortified, as also their lips, which dropped off; the mortification spread to their cheeks and lower jaw; and the jaw bone in some fell down upon their breasts. When the mortification first began, we tried the bark to no purpose. Nothing but death rid the unhappy wretches of their frightful misery.”

Dodonæus observes, that the scurvy was occasioned in Brabant anno 1556, by the use of some corrupted rye, brought from Prussia, during a scarcity of corn. (See *Remberti Dodonæi praxeos medic. lib. ii. cap. 62. Ejusdem medicinalium observationum exempla rar. cap. de Scorbuto.*)

See also an account of Don Sebastian Viscaino's voyage, performed in the year 1602, to the western coast of California, where the author observes; “In many the gums, both of the upper and lower jaw, are swelled, both within and without, to such a degree that the teeth cannot touch one another; and withal so loose and bare, that they shake with the least motion of the head; and some of the patients spit their teeth out with the saliva. Thus they were unable to receive any food but liquids, as gruel, broth, milk of almonds, and the like. This gradually brought on such a weakness, that they died whilst talking with their friends.”

Although this disease has received the denomination of scurvy, yet from a comparison of its symptoms, it will be found to have a great resemblance to the Eastern plague. Like that formidable disease it was preceded by the loss or depression of strength; syncope and stupor, with fœtor of the breath, were remarkable in the progress of the disease. Besides the enlargement of the parotid glands, buboes appeared in the groin; and the maxillary, cervical, and axillary glands were also affected with the swelling. Petechiæ likewise made their

appearance in some patients. In the advanced stage of the disease, motion was insupportable.

The analogy and relation which these two diseases have to each other, are exemplified in the scurvy which happened in Buda, during its siege in 1627.

With respect to the origin of this disease, the circumstances which have been mentioned by former authors, as giving occasion to it, have existed in a more remarkable degree.

Terre-aux-Bœufs is about fifteen miles below New-Orleans, on the eastern side of the river, from which it is distant a quarter of a mile. Like the country generally bordering upon the lower part of the Mississippi, this situation is low, wet, and, moreover, surrounded with marshes and ponds of stagnating water. The humidity was unusually great this year, from the excessive quantity of rain which fell early in the season, and which prevailed during the greater part of the time that the troops were encamped at this place.

The influence which marsh miasmata, moist and rainy weather have in the production of the various grades of bilious fever, from extensive observation and experience, is very well ascertained. It is also pretty well determined, that the same circumstances, when operating in conjunction with the other causes to be presently mentioned, do contribute to the production of scurvy.

It appears, however, that noxious exhalations alone are not capable of producing scurvy; their ordinary effect is to create fevers, diversified in character according to the particular quality and degree of virulence in the morbid effluvia. Such was the case at the commencement of the mortality among the troops at Terre-aux-Bœufs, when the fevers that are incidental and common to the climate only prevailed, by which few of the soldiers, comparatively speaking, were destroyed.

The efficient cause of this pestilential distemper was undoubtedly the use of unwholesome and corrupt provision. The pork, which constituted the principal part of the animal food among the soldiers, was old, rancid, and extremely offensive: the little beef which they had, was poor, lean, and meagre in the extreme; and

of so saponaceous and glutinous a quality, that it would stick in any situation where it was laid on. Their floor also was in a spoiled condition, having been wet, then becoming mouldy, hard, and full of worms. It was, in fact, so firmly agglutinated, that when the barrel was separated from its contents, the cemented mass retained the shape given to it by the cask, and stood firmly erect like a block of wood; and such was its solidity, that an axe, and other instruments, were necessary to divide it, and reduce it to a state of flour.

That the disease was principally occasioned by the bad diet of the soldiers, is proved by the circumstance, that the officers, who lived upon better provisions, which they purchased from the inhabitants at an extravagant price, were exempt from the disease. Something also might be ascribed to their being better and more comfortably lodged.

Situated as our soldiers were at Terre-aux-Bœufs, it could not be expected that the talents and exertions of a physician could be of much avail in counteracting the progress and mortality of this destructive malady. The ordinary means calculated to afford relief in the disease, proved here insufficient and abortive.

Considering the complicated nature of the complaint, it might have appeared difficult to find a medicine calculated to answer all the purposes which the symptoms of this disease seemed to require.

Towards the end of August, finding that the total destruction of the army would be the inevitable consequence of remaining in that pestiferous situation, under existing circumstances, it was at length determined to abandon the devoted spot. Washington, on the Mississippi, was the place of destination. The men were, accordingly embarked, but under circumstances not the most favourable to their condition. They were closely stowed in open boats, and most of them, being both averse to, and unable to use exercise, they lay in that confined and pent up situation, enveloped in an *idio-miasmatic atmosphere*, generated by their own putrefying and filthy bodies. It will readily be supposed that filth, want of food, together with a hot inclement season, rendered their situation worse than at Terre-aux-Bœufs.

They were forty days in ascending the river, before they arrived at Washington. There, upon landing, they exhibited the most deplorable state of human wretchedness. The ground was strewn with the dying and the dead; objects the most pitiable and horrid. In the last stage of existence, on the verge of dissolution, nature, unable to support the load of accumulated misery, sunk under the oppressive burthen; and the devoted fugitives flying from a persecuting pestilential enemy, were doomed to take refuge in the arms of death: so that in a short time after their arrival, the names of six-hundred were added to the catalogue of death.

It is probable that this mortality was augmented by the injudicious exhibition of mercury, which was presented as a general remedy by the superintending physician. The effects were evident and unequivocal to those who would give themselves the trouble of observing. A violent salivation immediately ensued, their gums became prodigiously enlarged, fungus and putrid, the mortification rapidly increased, hæmorrhages returned with greater profusion than ever, and every symptom was rapidly and sensibly aggravated. A few doses of this medicine relieved the patient of his misery, and put an end to his earthly sufferings. Death perhaps was inevitable, and it is certain that the patient's sufferings were shortened by this mode of treatment. Whether this, therefore, was to be considered as an act of humanity, consistent with the duties of a physician, I leave for others to judge.*

A wholesome atmosphere and a change of diet at length put a stop to the ravages of this disease; and those who were not yet brought beyond the restorative power of nature and art, rapidly recovered.

* An anecdote is related of one of the soldiers labouring under this disease, whom the hospital surgeon, upon visiting the sick in the morning, observed stretched out in the corner of the room, with a quantity of sorrel and green buds which he had procured, and of which he was eating; he turned to the attending surgeon and said, Give this man the mercury: try the experiment; for I am persuaded it is the most effectual remedy that can be exhibited in this disease. The patient overheard the charge, and replied, None of your experiments with mercury on me; I am doing well enough; and if you will let me alone I shall get well. The surgeon, in good humour, granted his request, and the man got well.

At Washington, the surgeons of the hospital, when not under the immediate direction of the hospital surgeon, would omit the use of mercury, and exhibit vegetable remedies. Those which proved most serviceable were sorrel and wild pepper-grass, which grew in considerable abundance in the neighbouring fields, and of which the patients gathered and ate vast quantities.

In one patient, while at this place, whose jaw was affected with mortification, a poultice of bark seemed to put a stop to the progress of the malady, and the man recovered.

There can be little doubt that all these forms of disease originated from a combination of the same causes. The air was highly impregnated with noxious miasmata; but every person was not equally exposed to it, as circumstances rendered him less subject to their deleterious influence.

In those persons therefore who lived upon unwholesome and corrupted food, and were not equally subject to the circumstances rendering them liable to be immediately and violently affected by the morbid poison of the atmosphere, disease showed itself in the form of scurvy, frequently attended with some slight febrile affection at the commencement, which afterwards subsided; when, on the contrary, circumstances concurred to produce a sudden accumulation of morbid matter in the system, by inhalation from the atmosphere, the morbid symptoms manifested themselves under the character of an invading fever, and that, in its most aggravated form, by a sudden abolition of sense and motion in every portion of the system, whereby the patient fell down exanimate, and unless enlivened by immediate bleeding, suddenly expired. What proves that this was but the symptom of a febrile affection is, that those patients who survived this sudden attack were afterwards affected with a violent fever.

J. W. HEUSTIS.

 REVIEW.

An Inaugural Dissertation on the Pathology of the Human Fluids. By JACOB DYCKMAN, A. B. Submitted to the President and Trustees of the College of Physicians and Surgeons, for the Degree of Doctor of Medicine. New-York. 1814.

WE have read this dissertation with much interest, and found it a good specimen of medical instruction. We think also that it has abundantly merited to its author the academie honours for which it had been offered, and that it would auspiciously procure for him a distinguished rank among his fellow graduates. But when we read the preface, we were sorry to find that an *inaugural dissertation* was thrown among us, like a gauntlet, to challenge or renew old controversies, and to stamp with rejection many recent theories, and ingenious doctrines from European and American schools, which superseded the humoral pathology as an explanatory system, on the cause of human diseases. The following are the words of the writer: "May the author be permitted to add, that the honour of restoring this pathological principle, as founded upon the most prominent facts which the science affords, and the most striking results which animal chemistry presents, has been reserved for this country, and for the present teacher of the theory and practice of physic in the University of New-York."

There is no reason at all why such a declaration should be countenanced, or else we may be permitted to hope that the dispute may cease for want of opponents, and that a surmised victory be obtained without the palm of honour; for

"A vaincre sans péril, c'est triompher sans gloire,"

There remain very few, indeed, among medical men, even of the old school, who profess no greater pretension to medical philosophy than that of being enlisted under the banners of *humoral pathology*, or of their opponents, the *solidists*.

The believers in the first have long ago acknowledged that, by assigning the cause of diseases to certain impurities of the blood, or to the peccant matter of the bile, of the lymph, of mucous, or gastric fluids, &c. they would not be better enabled to unravel the mysteries of vitality and circulation which so essentially concur to the preservation of life and health. On the other hand, the humoral pathologists must again be called upon to account for other causes which incessantly create an acrid or putrescent blood, cold and morbid, thick, superabundant, and choaking the vascular system. As for the *solidists*, they cannot hold an exclusive action of the moving fibres, nor the agency of nervous energy, or of sensorial power resident in the plexuses and fasciculi, which are incessantly and necessarily immersed in animal fluids; but are the *solidists*, whether of the Brunonian, Cullonian, Darwinian, and Rushian legions to be comprised in the same subjugation, when it is recollected that in their respective theories, of the *modus operandi* in the solids, whether by *mobility* or *contraction*, by *stimulus* or *excitement*, they do not pretend to exclude vital fluids from the influence of these powers?

An honest and equitable treaty of peace, it is thought, had long ago been concluded between the two parties, in which their respective rights and doctrines were happily conciliated, by a candid acknowledgment, that the primary cause of diseases is exclusively neither in the fluids or humours, nor in the solids. The very words of this final adjustment we find in page 27 of the present dissertation, which has thus settled the point which his preface seems to have called in question.

“ It is easy to apprehend that the animal motions may be disordered, and diseases brought on by a great variety of causes: for whatever too much increases or diminishes the nervous or vital energy; whatever too much excites or depresses the actions of the moving fibres; whatever renders the fibres too dry, elastic, and tense, or too moist, flaccid, and weak; whatever over and above increases or diminishes the quantity of circulating humours; whatever renders the blood too dense, thick, and viscid, or too thin, limpid, and serous; whatever

loads and impregnates this fluid with too large a proportion of active, acrid, putrescent particles, or with too many sluggish, poor, and watery corpuseles; whatever creates in the humours a tendency towards an alkaline, or putrescent disposition; whatever inordinately promotes or retards any of the secretions or excretions; and, lastly, whatever increases or diminishes the force or velocity of the circulation, or augments or abates the vital heat and energy of the body, beyond a certain degree, will affect or disturb the animal motions, and thus become the primary and immediate cause of some disease or other."

To confirm the authoritative import of this wise declaration, which annuls any claim of preponderance of either of the parties over the other, we will now show, that a treaty was *ratified*, as it were, by mutual consent, more than thirty years after one of the most vigorous contests that parties could be engaged in; which, we presume, had fairly tried the respective forces and merits of the disputants, and with argumentative weapons as dexterously used as they are in the learned dissertation before us.

The humoral pathology was considered by some, to have received a heavy, if not a fatal blow, from the hand of Francis Milman, who, in his ingenious inquiry into the source, from whence the symptoms of the scurvy, and of putrid fevers arise, endeavours to refer them, almost wholly, to morbid conditions of the living solids, and of the nervous system. The book which he published, to explain his sentiments, and to diffuse his doctrine, in 1782, was the subject of much discussion then, and for some time afterwards, in the schools of physie. For a time the *humorists* were discomfited, if not overthrown; and the *solidists* considered themselves at least possessors of the field, with the prospect of a sure and rapid conquest.

But in the autumn of 1784, his countryman, Samuel Ferris, came forth, arrayed with facts, and reasoning, and learning against him. The performance of this latter gentleman was composed in the Latin tongue, and was deemed by many as an elaborate, and able dissertation. He maintains throughout the bold position,

“ of the putridity of the blood, circulating through the human body.”

But in order to be understood, he gives the following definition of putridity: “ that it is a condition of the parts of animals, in which all of them, as the blood, the lymph, and the rest, are *in the very act* of decomposition, and their component particles *in the very act* of separating from each other, or of forming different and new combinations among themselves.” From this definition of putridity, he thinks it compatible with a coagulable condition of the blood, and with that firmness which exists in carcasses after putrefaction has begun. He is thereupon inclined to think there are no degrees of putridity, within which the parts of animal bodies, such as blood, lymph, white of the egg, liquor of the amnios, and other substances, not yet broken down, and dissolved, may verge towards a putridity, even now begun, and instantly progressing.

Ferris has pursued his idea through many pages of argument, in which he replies with studious and critical attention, to the several allegations of his opponent. This he has effected with so much pains and skill, that he may be said to have composed the text-book of the *modern pathologist of the humours*. Mr. Smellie thought so favourably of this inaugural exercise, that he re-printed and preserved it in the fourth volume of his *Thesaurus Medicus*.

Ferris, however, did more than review and answer Milman. He labours to reconcile contradictions, and to answer objections, among other authorities, as touching the state of the blood and secretions in scurvy, in putrid fevers, and in pestis. And, on the whole, he concludes his laborious investigation by observing, “ that after a full examination of the opinions of authors, and after a mature consideration of the arguments against the putridity of the blood, he must, nevertheless, entertain the belief, that a certain degree of it prevails during life.”

Perhaps since the days of Boerhaave, the pathology of the fluids never had a more zealous or intrepid advocate than Ferris. He was the restorer of the humoral doctrine in the city where Cullen and Brown were teaching,

at the same time, their respective doctrines of spasm and excitability, both almost equally regardless of the fluids. Since that time, his publication has remained to be used, by lecturers, as a magazine of choice information; and by disputants, as an arsenal richly stored with the weapons of debate, on the side of the question which he espoused; after having passed the ordeal of an academic *perlegi*, and of being publicly defended by the author, when he received the honours of the doctorate in one of the most celebrated of the European schools of medicine.

That the substances taken into the stomachs of animals do occasionally pass from the alimentary canal, without losing their peculiar qualities by assimilation, either with chyle, or with blood, seems plain to almost every observer. The bitter harvest weed of New-York (*ambrosia*) is greedily eaten by cows, and impart to the milk its peculiar and disagreeable flavour. The sedge of the sea coast (*carex*) can be tasted in the butter made from the milk of the kine that graze upon it. The taint communicated by onions and garlic, to the same productions of the dairy, is one of the complaints made by persons of delicate health against it.

The odours communicated to the urine by asparagus and by turpentine, taken into the stomach, furnish considerable reason to suppose that the aroma, or peculiar matter of these two vegetable substances, is not wholly subdued by the threefold process of chilification, sanguification, and excretion, but subsists in its proper and distinguishing character after the powers of animal life have been exerted upon it.

So madder travels through the circulating system, and is applied by the nutritive function to the bones, colouring them with its own reddish hue.*

Thus is the presence or a possible admission of certain substances into the humours ascertained, which, by chemical affinities, or by physiological laws, are rendered innocuous to animal life. How far these or

* Some notices of the morbid state of the animal fluids may be seen in Medical Repository, vol. ix. p. 330; vol. x. p. 405; vol. xii. p. 45—52; vol. xiii. p. 165;—examine also, vol. iii. p. 161—172, et alibi.

other substances are supposed to constitute the acrimony, the putridity, or the morbid state of the blood, *credat judæus apella!* But we dispense with any further controversy, returning with pleasure to the dissertation of Dr. Dyckman, which is replete with useful facts and practical observations to whatsoever system of pathology they might be applied.

The thesis is divided into two sections; the first of which treats of the morbid qualities of the fluids, and the second of their morbid quantity. The natural history of the blood, with its morbid fluidity, acrimonies, putrescency, and its alterations by specific poison, are the subdivision of the former. The nosology of plethora, with some of its attending diseases, such as dropsy, angina pectoris, and gout, with observations on the mode of relieving the latter by venesection, are the leading topics of the second part.

We regret that we have not time and space to analyze this testimonial of Dr. D.'s diligence and learning. We must, however, candidly dissent from some of his assertions and opinions, although they are consigned in this formal tribute of respect to his instructors, to his profession, and to his *alma mater*.

1st. We by no means coincide with him in the adoption of the words *putrescent*, or *putrescency*, to define that state of blood which is represented as being ready to undergo decomposition and putrefaction, (vide page 142.) while he rejects the word and the idea of *putridity*, on the score of its conveying the idea of actual decomposition and death. The one means the first stage of that condition of corruptible matter, when it is necessarily verging to its complete dissolution; and this word of *putrescency* could not serve, or answer to substantiate his hypothesis more than the word *putridity*. A chemist should not admit a modification, or a middle state between the laws which cement compound parts into one substance, and those which separate them again into various elements or compounds.

2d. With a view to another inference, the author explains the operation of specific poisons on the blood, by a kind of *ferment* or *assimilatory process*. This chemical definition is also inapplicable to any alteration of animal

fluids. If it is a *ferment*, or an *assimilatory process* which diffuses the small-pox in the human system, why does the leaven or poison remain in it latent without ferment? why does it delay its operation to an indefinite period of time? and why is the ferment frequently null, so as never to affect the disease? For a more unqualified rejection of this ferment, we refer our reader to the remarks of the author himself. (page 190 & 191.)

3d. The author says, in a note, page 190, "that it is satisfactorily ascertained that the plague is a specific, contagious disease, and, like small-pox or measles, is not only communicable through the medium of air, but also by inoculation." We might then ask, What result has been obtained from inoculation of the plague? Is the disease rendered any way milder and benign, so as to be possibly controlled in its deleterious effects, as the small-pox? We would be contented with the answer, that experimental observation has not yet been sufficient to ascertain the fact; but we declare that no such thing as inoculation of the plague is yet admitted and proved. The fact of Dr. Whyte, offered by the author, as recorded by Desgenettes, could not be mentioned by the latter but as an unavailing expedient against the disease. Dr. Whyte was the surgeon of the British Indian army. He was already struck with terror, and had solicited from his general a successor in his department when he resorted to the inoculation. As for Desgenettes, with whom we have personally conversed on that subject, far from thinking that the plague was contagious, he endeavoured to do away the dread of the French army in Syria, by inoculating himself in their presence, with the matter of a bubo recently opened, in two different places, to wit, in the groin and the arm-pit, from this operation he experienced only a very small degree of inflammation in both punctures.

Larrey, the Surgeon-General, with as much courage and fortitude, underwent the same operation, and was not at all affected by it. (*Vide Journal d'Observations, par Desgenettes: Nosographie Philosophique par Pinel: Assalini's Observations on the Plague; and a Report to the Medical Society of Paris, March, 1802.*)

To the other testimonies of Sonini and Wittman,

who professed an opinion which could never have induced them to try inoculation, we oppose that of the Hospodar of Wallachia, Constantine Ypsilandy in his letter to Dr. Decarro, of Vienna, as published in our Medical Repository, (vol. viii. p. 427.) The words of that high personage are the following: "The notion of guarding against the plague by inoculating with its own poison, promises no success; because it is very common to see people who have been cured of it ten times, die on the eleventh. We observe some of our charitable Imans, who, after having washed, rubbed, and buried thousands killed by the plague, without experiencing the smallest infection, are attacked, when least exposed to the supposed exciting cause."

We conclude by observing that this is the most ample and laboured of all the dissertations which have come forth under the auspices of the University of New-York. We own that we experience high satisfaction in contemplating the mixture of industry, spirit, and honourable emulation, in our countryman and fellow citizen, which produced the present performance. And we hope the studious youth will be encouraged, by this good example, to redouble their efforts, and to aspire to similar distinction.

Remarks on Febrile Diseases, with a Definition of Fever; in a Discourse read before the Medical Society of Rhode-Island, at their third Anniversary, September, 1814. By JOSEPH COMSTOCK, M. D. one of the Censors of the said Society. 8vo. pp. 191. Providence. Miller, Goddard, and Mann. 1814.

AFTER some introductory observations, Dr. Comstock proceeds to a brief consideration of the *yellow fever* which some years ago, as the first hexade of the Medical Repository fully testifies, was the endemic of our sea-ports; and of the spotted fever which, as the latter volumes of our work abundantly show, has been the epidemic of the country. Under the latter denomination he includes its congeners, the *typhus fever*,

pneumonia typhoides, cold plague, and malignant pleurisy. He repeatedly mentions the Medical Repository, and refers to it like a man of liberality.

He thinks the annals of New-England afford nothing in former times as its parallel, nor even approaching to it, except in some cases of malignant sore-throat, of which spotted fever may be a disguised form. It may be strictly termed an *ataxic fever*, from the protean forms and anomalous symptoms it assumes.

The opinion is maintained, that comparative anatomy, dissections of dead bodies, chemical analysis, and galvanic agency, will not explain the mystery of febrile action. It is from the *living* system alone that sound principles can be derived for understanding the nature and accomplishing the cure of diseases. The author does not consider the spotted fever as a new disease. But as this fatal distemper attacks frequently without chills, runs its course without increased heat or quickened pulse, and frequently destroys life in a few hours, it must be excluded from the class of fevers, or a definition must be framed different from that adopted by nosologists. The "*post horrorem, pulsus frequens, calor major*," are not symptoms of the disease; they, of course, cannot enter into its history, nor form any part of its diagnostic and character.

This sensible observer says, that as to the indications of fever from the pulse, it may indeed be quicker, but it may also be slower, and it may not be altered at all. The arterial condition, therefore, does not always indicate the presence of fever. Stupor, coma, low delirium, and insensibility to external stimulation, are sometimes the concomitants, if not the effects of morbid secretions congested in the alimentary canal. It is highly probable that torpor, gangrene, or death of some viscus or particular organ, may constitute primarily the whole febrile state. In like manner spasm and dryness of the skin are not pathognomonic signs of fever; for a moist, and even a sweating surface, are frequent attendants of febrile action, while it is undermining the powers of life, and prostrating the energies of the constitution.

After having considered these and other particulars, with becoming diffidence, he proposes his own definition

of fever, hoping that it will be found applicable to all the forms of that disease. He explains it as being "a partial or general deviation from a state of health in one or more of the circulating systems; (meaning the sanguineous, lacteal, absorbent, lymphatic, secretory, and capillary), and which is commonly discernable by the pulse being rendered quicker or slower in its individual beat, and in all cases, by diurnal exacerbations and remissions. It is also in some cases discernable by the appearances of the tongue, or some one of the excretions, which differ from those of other diseases, and from health." He, nevertheless, observes that there is a most astonishing variety of complications in febrile disorders. After stating his reasons for preferring the stimulant plan of treatment in the spotted fever, Dr. Comstock lays down his great practical precept in these words: "Keep the system as near the standard of health as possible." And if we understand him right, he governs himself after all, by the unerring facts afforded by the *lædientia* and the *juvantia*; the things that are beneficial, and those which are injurious in their effects; avoiding the former, and adhering to the latter, like a master in the experimental school.

We already know Dr. C. by his well written and valuable essay contained in our vol. vii. p. 1 & seq. We are glad to hear from him publicly again. He comes out boldly. Though we do not at present wish to enter upon the argument, we shall close our remarks upon his present performance by observing, that the whole pathology and nomenclature of fevers ought to be revised and retouched.

A Treatise on Gonorrhœa Virulenta, and Lues Venera.
By BENJAMIN BELL, M. D. Member of the Royal College, &c. With Notes, adapted to the present state of Practice in those Diseases. 8vo. Albany. E. F. BACKUS. 1814.

TO this edition no name of editors is affixed: but we are informed by them, in a short advertisement, "that they have added the last improvements in practice

as well as investigations on the nature of the disease." Their notes are generally instructive and well adapted. This publication is, therefore, a combined typographical enterprise, rendered more recommendable by some of our domestic and literary industry.

We formerly found fault with similar undertakings,* provided they were not keeping pace with our daily progress of knowledge and improvements in medical science. Many celebrated works may bear the test of time, in book-stores and libraries, as monuments of ingenuity, and objects of admiration; but there are few books, indeed, on philosophical or medical subjects, which can outrun a period of twenty years, as the best elementary instructors, or as preferable practical guides.

We apprehend that the treatise under consideration is very exceptionable, in the first division of it at least; that it is not entitled to universal confidence, and much less, to be pointed out as a standard regulating practice.

The systematic doctrine of two different kinds of venereal disease, however ingeniously or plausibly represented by Mr. Bell, never did engage but a few partizans of the celebrated schools of the continent of Europe, and even of Great-Britain, its native place; and that great desideratum is yet to be obtained, which shall demonstratively prove, that gonorrhœa virulenta, contagious in itself, is specifically a poison, totally different from lues venerea. On the very onset of the question, is it not very singular, if not absurd, that the first is known under one form of symptom only, while the other can really affect a multifarious and protean existence? Supposing, therefore, that the contagious poison of gonorrhœa was not by proper remedies radically cured, or alineated from the affected organ, (and this position cannot certainly be denied;) its remaining, or subsequent forms, must be judged to be merely inflammatory effects, without ever apprehending its diffusion through the system, unless its name be changed into that of a concomitant venereal poison!

It appears that some difficulties, by assimilating go-

* Vide our Review of Cullen's Treatise on the Materia Medica, by Benjamin S. Barton, Professor in the University of Pennsylvania. Vol. i. No. 3. p. 363.

gonorrhœa virulenta to syphilis, in their respective nature, were construed by Mr. Bell into *positive* proofs that they were totally different, when, in fact, those difficulties should not have been offered but as *negative* proofs. But let us, for a moment, examine those difficulties: the one is the peculiarity of an affection, *sui generis*, a catarrhal inflammation of the mucous membrane of the urethra; the other is the inefficacy of mercury to remove it; lastly, it is a failure of experiments to produce by the matter of one complaint, a symptom belonging to the other.

The first is not a more serious difficulty, than that of acknowledging that certain pernicious atmospheric constitutions can create a malignant fever in some subjects, and in others a coryza, a catarrhal affection, or an influenza. As for the inefficacy of mercury in gonorrhœa, it is not more surprising than its aggravating effect in the first stage of the syphilitic ophthalmia, which, however, like the first, with proper precautions, may yield only to mercurial treatment. We need not to say much respecting the experimental failure of the gonorrhœic matter in producing syphilis, although Hunter has proved the contrary: because, in the case of a poison received on a mucous membrane, it cannot probably be regenerated, but during the purulent stage that terminates the inflammation. In any of those experimental inoculations, the most important and characteristic circumstance, which is the *venereal act*, has no concurrence in them; the result, therefore, can by no means be taken as a test of the real nature of the matter employed.

We might notice many inconsistencies of the theory of Mr. Bell. What physician's authority in a forensic division would absolve a partner in matrimony, the corrupt nurse of an infant, or any seducer and adulterer, on the ground that the accused transgressor was infected with a gonorrhœic poison only, and totally different from the effects actually complained of?

Proh pudor! if ever there was such a shameful quibble resorted to! yet it is scientifically authorized by the system of Mr. Bell, and by his adherents; and with the book in his hand, an expert counsellor might puzzle the most pure and conscientious jury in the world.

However little disposed we feel within our limited time and space, to carry on a regular controversy, we must be permitted to observe, that the present Editors of Mr. Bell's Treatise explicitly find fault with his specific mode of injection. (*Vide* vol. i. p. 69.) If so then, upon what other important and recommendable ground was this edition undertaken? If it is upon his system of two different sorts of venereal poison, and if gonorrhœa virulenta is a local disease only; this cannot require more than a local remedy. The question, therefore, is to apply the best, and, forsooth, between the astringent injection of the first, and the white liniment of a British surgeon of celebrity, recommended by the Editors, which is to be applied by the means of a bougie, we confidently assert, that the first is preferable and more convenient. On the other hand, the latter remedy being a mercurial preparation, said to be successful; it demolishes at once, the systematic fabric, which is now published to regulate our practice.

In reading the 5th section of the work of Bell, on *deranged Sensations in the Bladder, Urethra, and contiguous Parts*, which are said frequently to take place when the leading symptoms of gonorrhœa, combated by injections, become moderate, we are surprised at the shocking list of evils and diseases attending the curative process of the author. Such an ordeal of pains, and dangerous accidents, we feel happy never to have witnessed; while we guide ourselves by that experience which shows best how to manage that complaint in its most violent forms, yet from principles, and with a method totally opposite to that of Mr. Bell. We can say the same of other distressing effects of stricture, swelled testicles, and prostrate glands, about which we challenge a sufferer or a witness, provided no untimely injection has been previously resorted to. With rest and low diet; with cooling and diluent drinks; with a few diuretics, and, perhaps, a little bleeding, nature can best perform a cure of gonorrhœa virulenta. It surely keeps off at least, the above train of horrid accidents. Mercurial remedies may be exhibited afterwards to destroy the last vestiges of the disease. We leave to any practitioner who is guided by experience, more than by theo-

ries and systems, the care of any subsequent or local effect; provided no essential injury has been brought on in the complicated organic structure of the parts of generation.

The second treatise of Mr. Bell on lues venerea, is, in a practical point of view, unexceptionable enough, although very incomplete with respect to important questions and various morbid effects connected with syphilis. To do justice to it, the Editors have introduced lengthy notes, and a good deal of instructive matter. Nothing could be more pleasing in our editorial capacity than to gather, like the bee, the precious honey from mental productions of genius and industry, in this Repository, where the contributions of so many worthy labourers have already been treasured up. But let it be said, that in our necessary excursion in the field of science and philosophy, which we are obliged to explore, no body is exposed to the stings of malice, nor the loss of their well-deserved earnings.

The note (page 133) relates to the *modus operandi*, or action of mercury in lues venerea, in which the writer has ably controverted the respective opinions of Hunter and Bell, the counteracting irritation of the first, and the antidotal power of the second, to introduce his theory. This is founded upon a *ferment*, or the *assimilating process*, by which a specific poison converts circulating fluids into its own nature, and which is remedied by the *excretion of the whole system*, while under the stimulating impregnation of mercury. It is requisite that it be introduced in that proportion which alone can be active on the constitution, that it should not run off through the salivary glands, or be enfeebled by any local or particular irritation. From this statement, we have now a few inferences to draw. The first is that of a poison, well ascertained to be a very great destroyer of animal matter, circulating in the whole mass of the blood, and consequently through the minutest ramification of the brain, of the lungs, and of the spinal marrow. The second is, that a metal in a state of very heavy and diffusible oxyde, which, when introduced in sufficient quantity to cause a *general excretion* of the system, is either floating in the same fluid mass, or mean-

dering through the same route of vascular tissues. Now, the efficacy of the latter, against the poison, supposes a simultaneous existence of the two different matters, and even a contact of both, poison and remedy circulating at the same time through the brain, the lungs, and the spinal marrow. And yet that phenomenon must take place without the least alteration in the sensorium, or in the operations of the mind, or in the power of vitality, contractility, and peristaltic motion of muscular coats! We have acknowledged, in the preceding pages, that certain colouring matter, or aroma, was possibly admissible in living fluids; but further than that, poison and metals, we do not think it possible, nor consonant with sound principles of physiology; we must therefore leave with our readers to consider and decide.

The second note (p. 159) from the same writer, relates to the preference he gives, above any mercurial preparation, to the oxymurias hydrargyri, commonly called *corrosive sublimate*. We confidently suppose that the very small quantity of mercury which this severe preparation affords, would set at defiance, as it is justly observed, any supporter of its *antidotal efficacy*. But might not the same argument be retorted against the forming a *general excretion* of the whole system? How could a few grains of mercury accomplish such an universal change, which are not, perhaps, one thousandth part of other preparations, and of what is required of the specific metal to affect the constitution in any sensible manner? This is another difficulty, and surely not less indifferent than many more which are not yet got over.—In many instances we should mistrust the corrosive sublimate. It is a costive poison, *per se*, if administered in due quantity; and this might be effected by a few, or many doses, rendered inert for a time, and accidentally accumulated in the stomach. Thus, although we are satisfied of its efficacy, and of its various safe modes of exhibition, especially to hardy and robust persons, we cannot have it recorded in our work, that it is a *safe and convenient* medicine, as long as its *injurious effects upon the stomach and bowels*, are acknowledged to require a *cautious employment* and a *due con-*

sideration of the peculiarity in the constitution and state of the patient. Hence, women and children generally, and enfeebled constitutions, labouring under irritable organic lesions, could seldom bear the presence of corrosive sublimate in the primæ viæ. Such has been, at least, the result of our observation in public as well as in private practice, and we would prefer to exclude them all from the list of proper subjects for that kind of preparation.

The 3d note by the Editor, (page 178) is an instructive digression upon the *crithema mercuriale*, or the *hydrargyria*. It is to be lamented that to the long catalogue of diseases incident to human nature, we should be obliged to add so many more that are created by our own remedies. We regret also not to find, from comparative documents, whether this grave malady and cutaneous disorder, is more to be excited by external than by internal application of mercury. It rarely occurs in private practice, but oftener in hospitals, and among patients who neglect much external cleanliness. Hence the great utility of French practice, to provide for frequent bathing and washing of the skin, during treatment by mercurial friction. There is a kind of miliary eruption arising from the bulbous root of the hair, after repeated frictions; but it is easily guarded against, by previously shaving the hairy surfaces on which the mercurial ointment is to be applied.

This edition contains two volumes in one. It is handsomely printed, and has an appendix of formulæ for injections and other remedies, with four handsome plates, of Mr. Charles Bell, illustrating the morbid anatomy of the urethra, and one of Mr. Whately, of his improved method of treating strictures.

Introductory Lecture to a Course of Lectures on Comparative Anatomy, and the Diseases of Domestic Animals. Delivered Nov. 3d, 1813. By JAMES MEASE, M. D. Secretary to the Philadelphia Society for promoting Agriculture, &c. Philadelphia. Bailey. 8vo. pp. 51. 1814.

UNDER a conviction of the importance of a course of instruction upon the subject mentioned in the title, Dr. Mease undertook the work with his own hands. The public are already acquainted with his name, and his useful writings. They have now before them the discourse with which he commenced his demonstrations on the structure and diseases of the animals living under the protection of man, and making a part of his property. He proposes to show their anatomical constitution; to explain the functions and uses of their several parts, and to compare them with those of the human body; to describe the diseases of brute animals, with the mode of treating and curing them; and to explain the *materia medica* which a physician engaged in this branch of practice ought to understand.

By comparative anatomy he means, the investigation of the structure of brute animals; and its objects are to demonstrate the diversity that exists among similar organs and analogous parts, and to compare them with each other, and with those of human beings. The author argues strenuously in favour of veterinary knowledge. The diseases of neat cattle and sheep, including the precious breed of merinoes, are of great moment, inasmuch as they involve the health and life of creatures that contribute so largely to the food and clothing of man.

Almost ever since the establishment of the Medical Repository, essays on the disorders and affections of domestic animals, have been recorded on its pages. In volume i. p. 335, very soon after its commencement, was inserted Mr. Parsons's letter on the mortality among the horned cattle, in Connecticut, during 1797. The life of man is sometimes endangered by the animals whom he rears and protects. Such is remarkably the case in regard to dogs. In the same volume, p. 387 and 390,

are contained valuable pieces of information on the effects of the canine virus upon the human system, and on the characteristic symptoms of madness in dogs.

In *Medical Repository*, vol. ii. p. 255, was published the first account, from the *Analytical Review* for July, 1798, of Jenner's inquiry into the causes and effects of variolæ vaccinæ, or cow-pox. And in vol. iii. p. 310, it is published, that the late Dr. Edward Miller had received from Dr. George Pearson, of London, a thread impregnated with vaccine virus. Smith's account of the leaf distemper among neat cattle, is contained in vol. xiii. p. 38.

Horses have their diseases. Of these the yellow water, as described by Dr. Sayre, is contained in vol. iii. p. 342; and the slabbering distemper occurring in them, as well as in cows and hogs, by Mr. T. Moore, may be seen in vol. ix p. 24.

Nor have the editors of this work been unmindful of sheep. Ever since the introduction of the Rambouillet merino breed to New-York, in the spring of 1802, by R. R. Livingston, L. L. D. they have attracted particular attention. The diseases of this most valuable creature are referred to in vol. xiii. p. 277, and in the review of *Bard's Guide for Young Shepherds*, vol. xv. p. 172-188. Mason's practical remarks on preserving the vigour of the ram are recorded in vol. xvi. p. 300-303; and Dr. T. D. Mitchell's observations on the rot are registered in our vol. xvii. p. 22 and 230.

Our work is rich in intelligence concerning dogs, their rabid distempers, the communication of the terrible symptoms thereof to the human race, and the various methods devised for their prevention and cure. Traveling back on our records, it may be seen, that the efficacy of blood-letting, as a remedy in hydrophobia, was discussed in vol. xvi. p. 19 to 31. The body of information, collected by Dr. Thatcher, concerning the rabid distemper in dogs, and in the human beings and brute animals to whom they communicate it, is exhibited in vol. xvi. p. 156 to 166. In *Medical Repository*, vol. 15, from p. 75 to 84, may be perused the municipal regulations of New-York against dogs; four of the great popular remedies against the disease, caused by their rabid

bites ; with an abstract of Bosquillon's and Bouriat's publications, in France, on the subject. The successful exhibition of quicksilver in hydrophobia, is asserted in vol. xii. p. 135 and 383, on the authority of Willaughby and Moseley. And, to be brief, we omit many other references, for the sake of directing our readers, at once, to the instructive mass of evidence distributed throughout the Medical Repository.

Dr. Mease recommends an acquirement of veterinary knowledge, as promising a novel and lucrative employment to those who qualify themselves to practice. The obscurity of many epizootic distempers calls for further investigation ; and such inquiry cannot be duly made by any ordinary observer. It can only be accomplished by the man of experience, sagacity, and genius. And it is probably owing to the rarity of the talents necessary to conduct such researches, that more has not been done. But comparative anatomy has shed so much light upon various parts of the human frame, and economy, that its study is enforced by very serious and impressive considerations ; such as a more satisfactory opinion, in certain instances, of the nature and seat of diseases ; a better knowledge of some derivative disorders, as the rabies from the dog, and the vaccine from the cow ; and also, the ability to form a more correct judgment of epidemic maladies, by the observation of antecedent and cotemporaneous epizooties.

The author has given the history of his subject from a very early period. In this he has manifested an extensive knowledge of books, times, and events ; and the text of his lecture is illustrated by the learning contained in three score explanatory notes.

An Address to the Literary and Philosophical Society of South-Carolina. Delivered in Charleston, on Wednesday, the 10th of August, 1814. By STEPHEN ELLIOT, President of the Society, &c. 4to. pp. 20. Charleston, Young. 1814.

SOUTH-CAROLINA has been distinguished among the North-American States, for the authors and publications she has produced. Catesby and Garden have acquired extensive and lasting fame by the substantial additions they have made to natural knowledge. Lining and Chalmers have been justly celebrated for their valuable writings on medicine. And Ramsay, Drayton, and Moultrie have distinguished themselves by their compositions on civil and military history.

The endowment of the university at Columbia a few years ago, was highly honourable to the Legislature. The efforts to establish a botanic garden near Charleston, upon the ground heretofore trod by Michaux, reflected credit on the gentlemen who engaged in it. And now we behold the erection of an association, for the express purpose of cultivating the physical sciences. We have for several years known the assiduity with which Mr. Elliot pursued his favourite studies of zoology, mineralogy, and botany. We now learn that he has not abandoned them; but, on the other hand, has raised a corps of servants to assist him in his work. It appears that the members of the society are distributed into nine classes: First, Mathematics and Mechanical Philosophy. Second, Chemistry, including Electricity, Galvanism, and Mineralogy. Third, Zoology and Botany. Fourth, Anatomy, Surgery, Physiology, and Medicine. Fifth, Agriculture and Rural Economy. Sixth, Commerce, Manufactures, and Internal Navigation. Seventh, History, Topography, Geography, and Antiquities. Eighth, Belles-Letters, Languages, ancient and modern, and Education, public and private. Ninth, the Fine Arts.

On these classes the orator makes appropriate remarks; exhibiting a compendium of the present state of knowledge and improvement; and his reasons for zeal-

ous and vigorous exertions, futher to improve and enlarge the boundaries of each.

We note, with particular satisfaction, this auspicious beginning, and hope the example of the president will be followed by the members.

An Address on the Botany of the United States. Delivered before the Society for the Propagation of Useful Arts, at the Capitol in the City of Albany, on the 9th of February, 1814. By JACOB GREEN, A. M. one of the Counsellors of the Society, &c. 8vo. pp. 30. Albany. Websters & Skinners. 1814.

THIS is a seasonable and earnest exhortation to the cultivation of Botany. The region surrounding the place at which the society holds its meetings, is rich and luxuriant in vegetable growth. Its productions have been but partially examined. Much remains to be done by the masters in this science. Tyros in all places have every thing to learn; and Mr. Green has exercised his judgment worthily, in calling the attention of the members to the plants of the United States.

To be sure, the pages of our work abound with this kind of information. Among a multitude of other matters, we mention the review of Michaux's Flora of North-America, in Medical Repository, vol. viii. p. 394; the original disquisitions of Mr. Rafinesque Schmaltz, in vol. ix. p. 422 to 483, in vol. x. p. 403, and in vol. xi. p. 356 to 363, and p. 423; the Catalogue of the Maritime Plants of New-York, by Dr. C. W. Eddy, vol. xi. p. 123 to 181; and Muhlenberg's Catalogue of the Plants of North-America, as represented in our preceding volume, p. 156 to 158. From all which, it appears, that there has been considerable attention bestowed upon the subject.

There are several other valuable contributions to American botany, which may be found in the anniversary discourse, delivered before the New-York Historical Society, in December, 1813, and published in the second volume of their collections, p. 147 to 215.

Amidst these honourable contributors to botanical science, comes forward the author of the present address. In a sensible manner he discourses of the natural and naturalized plants. Of many of them he speaks like an experienced and practical man. Of others, his acquired information is always respectable, and generally correct. He has pointed out many objects for investigation and trial. He has shown himself well informed on things already known. He has set a good example to his colleagues by his own actual attainments; and he has encouraged them by his advice to labour in the delightful fields of Flora, where all, who can afford it, may expect pleasure, and honour, and fame to themselves, and benefits and blessings to society.

The catalogue subjoined to Mr. Green's discourse is a substantial addition to the documents of the same kind, already before the public.

Medical & Surgical Correspondence.

Two Cases of Colica Pictonum, produced by the Acetate of Lead. Communicated by Dr. HENRY HUNTT, late Hospital Surgeon of the United States Army.

THE following is the statement which was given me by Major B——, (one of the sufferers,) at my first interview with him; which was several months after the commencement of his disease.

“About the middle of November last, Colonel J—— and myself, were attacked with Diarrhœa, and consulted a surgeon at Malone, (then belonging to the army,) who gave us a box of astringent pills, about the size of pease, (afterwards discovered to be the acetate of lead,) with directions to use them *frequently*, until our disease was checked. On an average we took five or six a day. Much relief was procured by them, and by the last of the month, we returned to duty at French Mills, apparently cured. We were so much pleased with these pills, that we each took a large box on our departure, and frequently afterwards had recourse to them. On the 5th of December, Col. J—— was seized with a violent pain in his stomach and bowels, attended with a frequent disposition to puke, and a painful tenesmus. Medical aid was immediately procured, and the most prompt and active remedies were used without relief. The symptoms daily increased in violence, and he lingered seven days, tortured with excruciating pain, and retained his senses until he died.

“After the death of my friend, (not knowing the cause of his death, or the composition of the pills) I frequently resorted to my box. Early in January, being much exposed to cold and damp weather, I was suddenly seized with a pain in my side, which was supposed to be the pleurisy. For this I was bled and blistered, with considerable relief. Soon afterwards I was affected with sick-

ness at my stomach, attended with flatulency, and a violent pain in my bowels, with tenesmus. A copious discharge of sweet saliva soon followed this attack, and continued some time. During this month I suffered great pain in my stomach and bowels, likewise in all my joints, and bunches of knots arose over my abdomen. My bowels were costive, and my appetite entirely destroyed. For these symptoms I took pills of calomel, until my mouth was sore; and a large dose of sulphur was given me daily; the operation of which never failed to increase the pain in my bowels. Injections were used with some palliation, but the sphincter ani soon became so contracted, that the pipe was with pain and difficulty introduced.

“About the middle of February I left the French Mills, and arrived at this place the 20th, in great pain. I was again salivated without relief, and afterwards, during the month of March, took Dover's powders. My disease continued to grow more violent and alarming, attended with pain and numbness in my extremities, and an abscess on each of my legs.

“In April I took wine and bark, but had no appetite to eat. The symptoms all increased, and I could not sleep without the aid of large quantities of opium.”

I was called on to visit the Major about the middle of May. He was lying in bed, and looked pale and emaciated; his eyes were sunk, his cheeks hollow, and his countenance dejected. He told me he was in violent pain, which could not be palliated without taking two or three grains of opium every three or four hours. His bowels were obstinately costive, and he was obliged to take some purgative medicine every day, the operation of which was severely painful, the sphincter ani being still much contracted. Food was loathsome to him, and he had profuse perspirations, for which he was taking wine and bark. A deep seated abscess was formed on one leg, and a superficial ulcer on the other. The gastrocnemii muscles were enlarged and indurated, and his arms partially paralyzed.

I soon discovered that the wine and bark aggravated his disease, and substituted milder tonics, until I had tried the whole list of vegetable and metallic tonics, without

any good effects ; when I was obliged to abandon them altogether, although his feeble pulse, cold skin, and great debility, fully justified the practice. I endeavoured to restore his appetite by lessening the quantity of opium, and substituting the tincture of hops as much as possible. Sweet oil was given him freely every day, for the constipation of his bowels ; large blisters were applied over his abdomen for the pain ; and his arms were freely blistered for the paralysis. His legs were washed in a decoction of galls, three times a day, and lightly dressed (the irritation being so great, that the slightest touch was painful.) His appetite was frequently coaxed by some little delicacy, and the sweet oil was frequently alternated by magnesia and rhubarb. This treatment was regularly pursued until the last of June ; and although he suffered much pain during that time, he was evidently better, and his appetite improved. He also slept well at night, and took but little opium ; he had no profuse perspiration ; the sphincter ani was more relaxed, and his legs were nearly cured. The pain in his bowels was less frequent, and not so violent. He was cheerful, and talked of soon returning to his duty. July the 4th I was sent for, in great haste, to visit him. When I entered the room, I was astonished at his altered appearance. His countenance was pale and fallen ; he was sitting up in bed, struggling for breath ; his body was covered with a cold clammy sweat, and he had a most anxious and desponding look. In a few words he informed me, that he was suddenly seized with a violent pain in his stomach and breast ; that he could not breathe, and must die in a few moments. I immediately gave him large quantities of ether and laudanum, applied flannel dipped in hot spirits to his stomach and breast, and ordered anodyne injections to be frequently and copiously used, until the pain subsided. This treatment gradually relieved him during the day, and at night a large blister was applied over the stomach and breast, and the laudanum and ether continued. The injections brought from his bowels large quantities of dark and hardened faeces. They were repeated every day during this month, with the happiest effect, and the masses of dark and

indurated faeces which were evacuated at that time, were astonishing.

On the commencement of the month of August, his thorax and abdomen were entirely relieved from all uneasiness, and he was again flattering himself that his disease was subdued; when he was suddenly seized with a violent pain in his left hand and arm, attended with an emphysematous swelling. This continued until the middle of the month, when a similar affection commenced in the right knee; and in proportion to the increase of pain and swelling in this part, those of the hand and arm diminished. He was tortured with the most agonizing pain the rest of the month, which nothing but large quantities of opium could lull for a moment. Repeated blisters and other applications were used without any relief.

Sept. 1st. He is much emaciated and exhausted from want of sleep. His left foot and knee are also affected with great pain and swelling. He complains of great difficulty in voiding his urine, and is always obliged to make strong efforts for several minutes before he can accomplish his wishes, when the urine suddenly starts in a full and copious stream.

6th. The pain and swelling have pervaded the whole of his extremities. Opium can no longer lull his pain, and death alone offers him hope of relief.

8th. His extremities are completely paralyzed.

10th. He is affected with erysipelas, and is gradually sinking into a state of insensibility. In this state he lingered until the 13th, when he died without a struggle.

In addition to the above cases, I have seen several others produced by the same cause, since I have been on this frontier. Chronic diarrhœa is a common complaint on the borders of lake Champlain, and the sugar of lead was at one time a fashionable remedy among the surgeons of the army. It was often given to the men while in the tented field, and exposed to the variety of this fickle climate. Without being cautioned, and ignorant of its baneful effects, no doubt, some of them used it improperly.

No one appreciates more highly than I do this va-

luable article of the *materia medica*; but *great caution* ought to be observed in its administration, without which, much is to be feared, that it will oftener prove a *bane* than an *antidote* to man; especially as some physicians express *doubts* of its deleterious effects.

REMARKS.

It will be recollected that in our preceding vol. p. 377, where we have enumerated many cases proving the efficacy of acetate of lead in various grave diseases, we nevertheless expressed our firm conviction of its deleterious influence on the human system. We invited also all possible attention of practitioners to ascertain some data to regulate the mode of its exhibition, and avoid its dangerous effects. For the above document, therefore, we feel greatly indebted to our correspondent. It is of such a nature as to justify our former doubts and reflections. We furthermore plainly learn, that an arbitrary and protracted use of acetate of lead, by being gradual, has for a length of time repelled any sensible injury; but the delay seems to have multiplied its morbid effects, and its operation has proportionably been more dreadful and irreparable.

Monography of a singular Case of Fatal Omentitis, with Dissection: Communicated to Dr. FELIX PASCALIS, by I. KERCHEVAL, M. D. of Bardstown, Kentucky. May 1st, 1815.

UPON the subject of medical intelligence, we are happy to remark, that from a favourable coincidence of physical causes, this section of the Union, for the last winter season, has been permitted to repose in an unusual degree of health. The dry serene state of atmosphere that attended our winter months throughout, was ever an assurance of exemption from the scourge of the preceding year; but few inflammatory diseases, and no epidemic of any character; even the militia of this state, who have braved the two-fold horrors of war,

and an inclement season, are now returning from the illustrious and memorable siege of New-Orleans, without any other complaints than are incidental to the fatigues and exposures of a *campaigning life*.

More recently, however, upon the accession of our vernal rains, (which indeed have been excessive,) some few wandering cases of the last year's epidemic may be traced; and although these are commonly gentle and remediable, yet, notwithstanding, some few cases of astonishingly sudden mortality have *lately* occurred in this vicinity. The cause of dissolution in these cases appears to have commenced with pain and oppression in the umbilical region, to which have succeeded, in the first stage, a general fever, but shortly followed by cold extremities, faintness, nausea, languor, and death in sixteen or eighteen hours.

Having been called upon to visit one of *these cases* of unexampled fatality, the ride was to some distance in the country; and I found, upon my arrival, that the patient had already expired. No less afflicted than astonished at the accession of death, (in one who, but a few hours before, was in the full enjoyment of health and vigour,) the family consented to cadaveric inspection, with less reluctance, in consequence of some vague apprehension of the instrumentality of poison.

The subject, a female of about twenty-two years of age, being disposed for the intended inspection, I determined to make a longitudinal incision, extending (in the course of the *linea alba*) from the *scrobiculus cordis*, to the *symphysis pubis*; then a transverse incision terminating its points towards the kidneys, so as to intersect the first incision at the umbilicus, with the intention of exposing the whole of the abdominal visera fairly to view, where we entertained but little doubt of detecting the seat of the malady.

A distended fullness evidently prevailed over the abdomen, and upon penetrating the integuments, a stream of extravasated blood gushed out with great violence, protruding some portions of the omentum, which betrayed the characteristic appearances of the most intense grade of inflammation. These morbid discoveries seemed at once to indicate the nature of the disease, and

the immediate cause of death ; nor were these indications in any measure found to be fallacious, for the whole of the viscera, including the uterus and its appendant mechanism, (except the omentum and its accompanying envelops and continuations) were found to possess the most sound and healthy appearance ; the omentum alone was swoln, turgid, and suffused with dark and grumous blood. The quantity of extravasated blood and lymph on this occasion, found within the cavity of the abdomen, exceeds any example I had before ever witnessed, or remember to have seen related by others. This extraordinary mass of humours, yet fluid from the remaining warmth of the body, could not, by a moderate estimation, amount to less than ten or twelve pounds ; a quantity, indeed, that is difficult to account for, unless it is admitted, that from the intensity of the inflammatory excitement and consequent over distension in the minute arteries of this reticular substance, their coats were ruptured, and the blood at the same instant burst from a thousand orifices ; and in deciding upon the immediate cause of death in this instance, we cannot but suppose the excessive hæmorrhage must have contributed (by a too sudden obstruction of momentum from the heart and large arteries) not a little to the acceleration of the fatal period.

But on the other hand, if it should be conjectured that the hæmorrhage in this case was the primary cause of mortality, and the issue of blood alone proceeded from an individual vessel of a larger capacity, and not by effusions from the inflammation of the omentum, it may be observed in disproof of such objections, that the actual appearances exhibited by the omentum itself, and the pre-existing pain and torments of this part, must be considered as demonstrative arguments against it.

In relating the circumstances of this case of most extraordinary fatality, I do not console myself that much practical utility can ever be derived from the disease itself ; nor that a morbid determination to which, in some of its relations, our winter epidemic may be assimilated, has not become general among us ; and I flatter myself that the season is already too far advanced to protract it much beyond this juncture. Diseases of

such intense violence seldom exist, and more rarely have their seat in that part of the system above described.

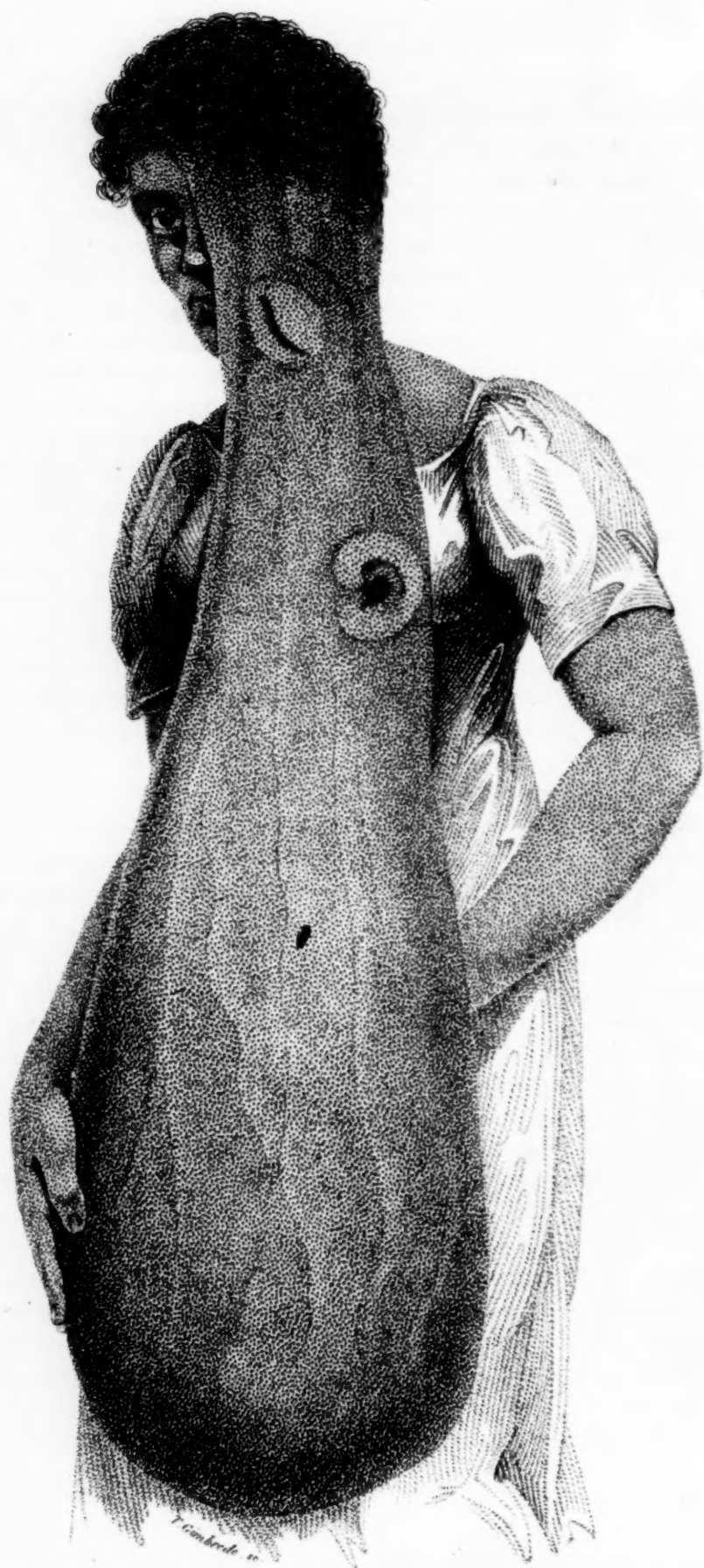
But I leave it with you, Sir, and your intelligent coadjutors, to say how far this case of omentitis may be found analogous to peripneumonia, with the exception only of the incidental circumstance of the inflammation having located itself in the omentum, rather than the pulmonary membranes. I cannot, however, dismiss this subject without expressing my sincere regret at the unfounded prejudice that prevails throughout our country against morbid dissections, as nothing is so possible to develop the nature of unusual diseases: it is indeed the only torch by which we can plunge into the arcana of diseases, explore the frailties of our nature, and shed a hopeful ray upon the miseries of man.

The History of a remarkable Tumour, arising from the left side of a Woman's Head, dislodging the Eye and Ear, and hanging down as low as the Knees. In a Letter from THOMAS W. ROPER, M. D. of Charleston, South-Carolina, to Dr. MITCHILL, dated June 9th, 1815. (With a Plate.)

THE disposition which tumours possess of continual progressive increase, is a point not less singularly interesting than intricate; and though it is one which has long challenged the investigation of enlightened men, it has as yet been satisfactorily explained by none. The one opinion in relation to tumours, is, that they are entirely new productions, extraneous to the natural organization of the body, being the product of some distinct and morbid secretion, and from peculiar diseased action. The other position maintains, that in the growth of tumours there are no peculiar actions set up, and that the same pulsation which adds increase to a tumour, contributes to the regular nutrition of the body. The latter opinion I conceive to be the just one; but why the same arterial actions which produce the natural evolution of the body, and preserve in it so systematic a uni-

formity, should, in the case of a tumour, be regulated by no law, and its growth circumscribed by no guardian principle whatever, is a problem of no easy solution. But to the speculative I refer the principle; my object at present is to give you a brief outline of a very singular and enormous tumour, which has recently been exhibited in our city, as a public spectacle.

The unfortunate individual is a woman of colour, who was born of healthy parents, in Newbury district, in this state. She is of robust form, apparently enjoys good health, and does not exceed 35 or 36 years of age. When she was two years old, a smooth fleshy exerescence made its appearance over, though unattached to, the left parietal bone, not very remote from its anterior inferior angle. Its increase, though at first slow, has been uniformly progressive. About her tenth year, it is described as having filled up and descended along the temporal fossa. Having become pendulous, its rapid increase and elongation were truly surprising. The eye of this side, with all its appendages and integuments, with great agony to the patient, was drawn from the socket mechanically by its weight; and in the same manner did the ear descend, the integuments of the whole left side of the head and face having relaxed and admitted of their descent. The mouth, and left nostril especially, became also remarkably distorted. Now the immense pendulous flap appears as it were suspended from the integuments of the frontal and parietal bones, and again to have a second attachment from the chin and throat. When the woman is erect, it extends to her knees. I find it to measure three feet three inches from the situation where it originally sprang. At its lower or bulbous extremity it is rather more than two feet five inches in circumference when uncompressed; just below the chin it is about a foot less in circumference. The ear rests on the left mamma, having descended from its natural position about fourteen or fifteen inches, and it has undergone, at the same time, considerable enlargement and thickening in every direction. The meatus auditorius is still pervious, and a discharge, rather foetid in its nature, constantly distils from it. A probe has been introduced in it, I am credibly in-



formed full fourteen inches, but the auditory nerve of this ear has for some time lost its excitability to the impression of sounds.

The most remarkable peculiarity in the history of this case, I think, is the descent of the eye, which has been dragged five inches from the socket. The external canthus being probably first acted upon by the volume of the tumour, the position of the cilice, which is naturally transverse, is now directly longitudinal; they are as large as those of a horse, and usually kept closed. The meibomian glands being very prone to inflammation from slight causes, were, at the time I saw her, affected with violent psorapthamia. The eyelids have a tremulous movement, resembling winking, which movement is synchronous with the actual winking of the right eye. In separating and looking between them, the organization of the eye does not appear materially injured. Though the optic nerve is so extraordinarily elongated, the poor creature can still discern with it day light from darkness; and two years ago the sight in it, she affirms, was tolerably good. Vision in the *stationary* or right eye is perfect.

The weight of this great sarcomatous growth, has operated a singular change in the form of the inferior maxillary bone; its left half from the symphysis being so straightened, that its figure, which, in the natural state, resembles the Greek (ϵ) bears in this individual considerable analogy to the gamma inverted (γ). The transverse direction of several of the teeth are consequently completely transposed, and when the finger is introduced into the mouth, a smooth deep pouch at its anterior part is felt, usually half filled with saliva, and which, from its extraordinary situation, and its depth, involuntarily called to mind the pouch which hangs from the bill of the pelican.

The tumour, when examined, feels like dough, is equable as to its surface, but within contains numerous irregular masses, connected seemingly together by cellular membrane; fasciculi of varicose veins, equal in size to the thumb, may be plainly distinguished involved in the mass; and a few superficial ones divaricate and meander along its surface. It has no tendency to inflam-

mation or suppuration, and though it formerly did, yet it does not now give her any pain; but, as you may naturally conceive, is extremely inconvenient and oppressive from its great bulk, so that she is obliged to keep it constantly supported in a large sac. The integuments are loose and flaccid, and apparently sound. Though the distention is so considerable, I did not remark the cutaneous papillæ had undergone any notable enlargement. Small tufts of woolly hair have grown from many places over the upper part of the tumour. Its temperature is the same as that of any natural part, and its sensibility very acute, so that she immediately discovers when flies or other insects light upon it.

There appears to be a constitutional propensity in this woman to the generation of such tumours; her body generally, but particularly the back of her neck, is covered with a multiplicity of them, of various dimensions. In the latter situation, there is one which has already attained the length of several inches.

It is a subject of curious remark, that so great an abstraction of blood as this tumour continually withdraws from the general system, has produced no bodily debility. I was anxious to learn also whether it had any effect on the uterine system. I was informed that the catamenia was ever scanty, and the woman has always lived, and declares she still feels the same disposition to continue, *absque marito*.

The annals of surgery afford but few examples of such monstrous productions. I at present remember but one more voluminous; that recorded of Eleanor Fitzgerald.* Here the tumour is described to have been the effect of accident, to have sprung from the same situation, to have acquired such prodigious bulk, that it hung from the throat and breast like an immense bundle of intestines, *a yard and a half* in length, and according to the spirited narrator, was an appearance altogether "as wonderful as any thing that ever happened in the human body." But here, though the volume of the tumour was so prodigious, it appears not to have altered even the lineaments of the countenance;

* In Bell's Principles of Surgery, vol. iii.

and when contrasted with the case I have recorded, the small degree of distortion induced is really surprising. In this, and several other points, the case now communicated appears to me more remarkable, nay more "wonderful," than that detailed by Mr. John Bell; it is, moreover, another "eloquent example" strongly impressing that important solemn warning upon practitioners, never to abandon growing tumours, if remediable, to the deceptive expectations of time and nature.

The preceding statement I had thus far drawn up when I discovered that a short account of it had been published, about ten years ago, in the Philadelphia Medical and Physical Journal. But as this work never had any other than a very limited circulation, and the tumour in the interval has undergone considerable alteration, I trust this additional statement may not be deemed by you uninteresting or supererogatory.

Ten years ago (according to Dr. Casey) the greatest length of the tumour was twenty-four inches; its fundus in circumference twenty; the descent of the eye, four; of the ear, nine. Should then this woman's life be protracted for ten additional years, (of which there is no improbability whatever), and this tumour increase upon the principle, characteristic of all others, that, the greater the bulk, the greater the stimulus, and consequent determination of blood into it, it will unequivocally be the most voluminous upon record.

Remarkable Account of Hereditary Blindness, affecting several Branches of an extensive Family: Communicated by ENNALS MARTIN, M. D. of Easton, Maryland, in a Letter to the Editors, dated June 20th, 1815.

A Few days ago I was called to visit Philip Rigby, the grandson of Moses Lecompte, the first of the blind race of men, as stated in the annexed account. This visit reminded me of an intention, which I have long entertained, of communicating the same subject to

the editors of the *Medical Repository*, which has lain concealed in an ephemeral work printed in this city, since the year 1809.

A hundred years have made it familiar in Dorchester and Talbot counties, while the virtuoso, who has never heard or read of such an instance, will be filled with amazement, that a blind family could have existed so long, and yet not be known more generally. The following is the first account we had from the learned Dr. James Kemp, D. D. now Suffragan Bishop of Maryland.

“Anthony Lecompte was a native of Picardy, in France. He left his native country on account of a persecution of the Protestants, to whom it seems he belonged, and took refuge in England, about an hundred and sixty or seventy years ago. For about eleven years he was an officer in the British army, in which time he married Hester D’Oetleng, who had also fled from Normandy in France, on the same account. He then emigrated to America, where he was soon naturalized, and took up a pretty large body of land on the south side of Choptank River, in Dorchester county. After his settlement here, he lived about fifteen years. Neither he, nor his wife, nor any of their ancestors were ever known to be blind.

“Mr. Lecompte had six children, four sons and two daughters—of his sons, the second only, named Moses, became blind, but none of his daughters. Moses was a healthy man, and it is not remembered, that he ever met with any calamity, or accident, to affect his sight. Blindness commenced in the usual manner and at the usual time of his descendants. He married after the commencement of blindness, and had eleven children, eight sons and three daughters. He lived to be fifty seven years of age.

“Of the sons of Moses Lecompte, six became blind, and all his daughters. Three of the blind sons and two of the daughters married and had children, which constitute the present generation. In each family some are blind, and some enjoy their sight. The whole number to which this calamity has extended, is said to be thirty seven, of which seventeen belong to the present generation.

"Blindness, in general, begins to advance about the fifteenth or sixteenth year of age, and ends in total privation of sight about twenty-two. Previously to any symptoms of blindness, there is no appearance of any weakness or defect in the eyes; but as the sight declines, a hot humour, at times, issues out of them. Among the first symptoms of declining sight, is a circle seen round the candle or the moon; and as the disease advances, the *pupil* enlarges and the *cornea* becomes more convex. One eye, it is said, becomes totally darkened before sight declines in the other, but then blindness rapidly advances.

"Several eminent physicians have been consulted, and many applications tried without effect. Frequent and copious bleeding has been found to lengthen the progress of blindness. Of one person, it is said that it protracted total blindness till about the thirty-eighth year of his age.

"The understanding, and indeed the imagination of those who are affected with this dreadful malady, seem to become more acute and active, as well as the external senses. Although they can distinguish no object, not even lightning, however vivid, yet they say they have a kind of *lightness*, and when their eyes are covered, they are reduced to impotent darkness. They all declare, they can tell when they are near a person or a tree, and that too, in the calmest day.

"They are generally healthy, and live to a considerable age. During the decline of sight they seem melancholy, and dejected. But after total blindness they become as cheerful and sprightly as most people.

"The disease seems to decline.

"When I visited Philip Rigby," now almost eighty-six years old, a few days ago, who is the grandson of Moses La-compte, he informed me, that he had been blind sixty odd years, in view of one of the most delightful water prospects in the world, looking down the Choptank into the Chesapeake Bay. From the accounts recently obtained from this branch of the blind race, it would rather appear, that Bishop Kemp has not been so correctly informed, as to the declension of this hereditary disease; but, contrariwise, that its victims have been increasing; so

much so, that in the case of some of Philip Rigby's brother's families, not one of them have escaped blindness! The grand-children of Jonathan Rigby have all gone blind, before they reached the age of twenty; and one at the age of twelve began to show symptoms of blindness. Oh, wretched people! Oh, how blind to the happiness of future generations! Philip Rigby married after he was blind, but never had any children. All the other brothers, three in number, have a numerous progeny, except Moses Rigby, who did not go blind; but all the others went blind at the usual time, married, and most all their children and grand-children are blind, or look forward with hopeless expectation.

REMARKS.

It appears that there is a material difference between organical defects, which are transmissible to remote posterity, as it were by hereditary descent, and others which from their primordial existence gradually disappear and wear out, after a few generations. Of this description are certain deformities or characteristic features of different species, concurring at the formation of a crossed breed. Thus the crisped hair, the black colour, the facial angle, the flat foot of the negro kind, if wholly or partially received in the offspring, will entirely disappear, at the fourth generation, as if nature would always model her castings according to the primordial and most perfect type. By the same law, a puny and half-starved couple become sometimes the parent stock of a hardy race of men. On the other hand, while our species, the noblest in the creation, is composed of less varieties than any kind of the brute creation; yet it offers some genera of singular incomplete and deformed nature. Such are the Cretins of the Alps; the Albinos of Africa; the *Goitres* in Savoy, and Somerset county of Pennsylvania; the blind families of Maryland; and the horrid tribe of savages in South-America, who live upon balls of clay. It would be very difficult to trace the line of organic structure which nature has the power of outstripping, and that within which she continues and propagates organical imperfec-

tions and deformities. Be it as it may, the hereditary blindness now offered to our observation, is no more than the effect of a determined organic predisposition, as in the cataract, which is known to exist in families at a certain period of life, and always of the same character; for this blindness is said to take place from the 16th to the 20th year of age. It may be hoped that the exact pathology of the organ of sight will be ascertained in a sufficient number of instances in the family of the Lecompte, and of the Rigby, which might suggest some indications as a foundation for prophylactic remedies, that could by degrees protract blindness to a more advanced period of life, and then gradually do it away.

INTELLIGENCE.

Diseases and Bills of Mortality in the City of New-York, August, 1815.

THE uninterrupted healthiness of our city, during the last winter and spring months, was noticed in our preceding number. The pleasing task returns again to record, that the vernal period has offered to observation much less of its usual morbid affections of the phlegmasiæ, catarrhs, ophthalmiæ, angina, than atmospheric variations of temperature, of humid and cold weather, seldom fail to create. It is true, that the spring revives nature, and implants a new vigour to the animal economy, as well as to vegetable productions. They all recover thereby their former vigour, and grow better able to resist all natural causes of disease. Hence, with the exception of a few specific epidemics, which cannot be in operation until a mild temperature prevails, the number of diseases is always rare at the approach of the summer. Hoffmann has preceded us in the same observation. (*Circa equinoxium vernale animalibus summum robur constare observamus.* Phil. corp. Hum. Lib. ii. cap. 3.)

To the variable and rather humid temperature of the spring, an oppressive heat has succeeded, and has been uniformly protracted until the end of July. An idiopathic debility of the system has been the consequence, and has created many cases of intermitting fever, of the tertian and quartan types. It was sometimes preceded by, or transformed into a remitting fever, with pains or a sense of weight in the stomach, and with spontaneous discharges of bile, but no particular complication of symptoms has contributed to the aggravation, nor to a long continuation of that disease.

If during a hot summer, the inhabitants of our populous sea-port towns could forget the former occurren-

ees of yellow fever, they would be reminded of it, by our annual restrictive health laws, and by a formal address of the board of health. With a promulgated system of purifications, of quarantine, and of ventilations, founded principally on the doctrine of importation of foreign pestilence, the fomes of which should be carefully confined, smothered, or killed, before it can be transplanted within our walls by strangers, or by bales of goods, and which prevention is legally declared to be accomplished within a certain number of weeks; is it surprising that our citizens should be alarmed and incessantly disturbed by rumours, or by resemblance of some kind of contagious fever, the deadly poison of which has probably found its way, and is creeping among them? This fear, and, we may add, a terror, have been the only prevailing diseases during the month of July, the bills of mortality of which are lessened below the records of any previous month in the year. A few deaths from sporadic typhus* gave rise to the

* A sporadic case of malignant fever occurred to Dr. Mitchell, the attending physician of the New-York Hospital, which is worthy of being recorded.

Charles Mullen, a native of Ireland, twenty-three years old, was admitted on the 11th of July, 1815, with the common symptoms of fever. There was nothing of peculiar moment in his case at the time. But on the 12th, he suffered a severe chill, which was followed by a proportional exacerbation of fever. On the evening of the 13th he bled at the mouth. This was renewed on the morning of the 14th. These hæmorrhages were considerable.

There had been, from the time of his reception, some irritability of the stomach, and a tendency towards diarrhœa; and these symptoms increased so as to be troublesome. On the 15th his debility was greater, and his situation in every respect more serious.

On the 16th his strength was exceedingly reduced; pulse feeble and quick; tongue completely covered with a dusky coat and tough slime; the skin dry, and stinging the fingers with the pungency of its heat; at times a partial moisture, particularly about the head and chest, which was exceedingly fœtid; and the urine and stools came away involuntarily, with almost intolerable stench. He was harassed with extreme anxiety and restlessness. The nausea and vomiting increased during the day, and a dark brown matter was ejected in considerable quantity. Towards night the black discharge from the stomach was tinged with blood, and a slight bleeding from the nose and ears supervened, and there was an oozing of blood from the gums.

All this time the most appropriate regimen and remedies were administered. The disease gradually became worse, in spite of the

alarm, and our trembling fellow citizens were not rid of the panic, until they were officially informed of the non-existence of the pestilence, which they never could see within their precincts.

The mean temperature of the month of July reached many times fourteen or fifteen degrees above summer heat, 92 or 93° Fahrenheit, as it will be seen in the following table, and it was never under it. This circumstance, with that of a greater quantity of fruits and vegetables afforded by the season, have naturally predisposed to various bowel complaints, principally to cholera morbus, to enteritis, to iliac passion, to erythema and other anomalous eruptions. Any of those morbid effects that came to our knowledge, were easily subdued by timely and correct practice.

A dry constitution of the atmosphere is generally expected, and has taken place in New-York, after an uninterrupted succession of hot weather; our luxuriant vegetation was already withering under the scorching sun of the summer solstice. Many a day's existence seemed burthensome. Organic and mental powers were exhausted; and the studious man of letters, or

assiduous efforts of the physician and the nurse. The cuticle raised by an epispastic of cantharides contained in its vesicles a dark yellow lymph. On other parts of the body, especially the lower extremities, similar small collections appeared, under the epidermis, spontaneously. The agitation on the 17th was vehement. He excited the surprise of the ward, by suddenly rising from his bed, and walking partly across the floor, refusing all offices of assistance. When asked how he felt, he replied, that he was very weak, but in other respects was pretty well.

After a short abatement his pyrexia was renewed with increased violence. On the 18th, the vessels of the eyes were suffused, the face flushed; and he could with difficulty be kept in bed. He tossed his limbs in every direction until he was apparently exhausted. His hands were busily engaged in scratching almost every part of his body.

On the 19th, subsultus tendinum came on, with great and general tremors. The perturbation was incessant, until by degrees he sunk into the calmness of stupor, and the quiet of insensibility. He breathed his last at eight o'clock in the evening, notwithstanding the very vigorous practice that had been employed to preserve his life.

Dr. Mitchill ascertained that he came in a vessel from Savannah in Georgia, a place at which there was no yellow fever at the time. He did not derive his disease from any person. It was engendered within his own body. He did not communicate it to a single human being.

of scientific researches, might well think to himself, and exclaim like the Roman poet, "*nec tantos corpus sustinet æstus, ferrentes que auras!*" (*Ovid.*) But if the temperature is immediately reduced much below the summer heat, and the human constitution is tried by a change of more than thirty degrees, the season becomes critically morbid, and predisposes the system to pernicious autumnal diseases. The heat of the summer, said Hippocrates, augments the bile,* as the spring has increased the mass of blood, meaning thereby what influence former seasons may have in predisposing to sickness. Notwithstanding these doctrines and grounds for apprehending the existence of autumnal diseases, we are happy to have it in our power to say, that at this period the health of this populous city remains as much unimpaired as it has ever been observed to be at any former time. Many salutary and wholesome practices have been resorted to, by all classes; and being persuaded of their unquestionable influence on the preservation of health, we are led to offer some remarks on their use and proper applications. We mean the warm or tepid baths, the cold or salt-water bath, and the frequent potations of soda-water.

1. Warm or tepid baths restore, by absorption of the cutaneous surfaces, nearly as many watery particles as the vascular system loses by excessive sweats, and allay that immense irritation manifested by what is commonly called *prickly-heat*. By relaxing the secretory and excretory organs, warm bathing abates their irritability, rendered morbid by their unceasing action under the stimulus of heat. It assists also the return from expanded vascular tissue of those fluids, which, under an atmospheric pressure, is diminished by too great a proportion of caloric, are incessantly carried from the center to the circumference. Of the warm-bath it may be said, that experience, unaided by physical science, had demonstrated its utility to the ancient Greeks and Romans, as it is attested by the splendid remaining ruins of their public and thermal *balnea*; bathing-houses, and steam-baths, are also of immemorial resort, among the

* Velut æstus bilem gignit, sic ver sanguinem. (*De humor.*)

Turks and the Moors. In the barbarian cities on the Mediterranean coasts, they are as common as barber shops in our country.

The warm-bath should not be used too often, as it would enervate and induce a great debility, disproportionate to the daily calls of occupation and industry. Nor is bathing in hot water ever required or useful ; it disturbs the animal functions, and creates a febrile action. The heat of the blood, 98° of Fahrenheit, should be the proper standard of warm bathing, and oftener below that temperature.

2. Of the cold baths, and salt-water baths, we observe, that they are of infinite advantage when accustomed by early habits. The latter are highly stimulant, and therefore should be cautiously used, and according to the state of the constitution. They are pernicious, at least to high livers, to plethoric habits, to aged and diseased persons. The excellent treatise of Buchan on the use of cold baths may be referred to, to prove the necessity of discrimination in individuals in the general use of cold bathing, which should be the sole province of a physician to determine.

3. *Soda-Water*, or carbonate of soda, is much used in this city, as a refreshing and exhilarating beverage ; it possesses the double property of laxative saline solutions, and of a stimulant, by the presence of carbonic acid gas. This, however, extends no farther than over the palate and the organs of deglutition. It is of great utility to those who live on rich food and strong liquor, as long as it does not impair the digestive functions, and provided they are not of rheumatic or gouty constitution. Frequent potation of soda-water enfeebles the stomach, and proportionably confines the bowels more after its use than it accelerates their excretion by its presence. In a general point of view, it is a wholesome drink, infinitely and frequently useful as a harmless substitute for liquors which, creating more thirst, become truly pernicious.

**THERMOMETRICAL OBSERVATIONS for the Month of
July, 1815, in the City of New-York.**

July		A. M.	P. M.	P. M.
		8 o'clock.	2 o'clock.	10 o'clock.
1		79	88	80
2		76	86	78
3		76	84	70
4		68	76	73
5		70	80	70
6		70	76	68
7		72	76	70
8		68	78	74
9		78	83	75
10		78	80	76
11		78	84	76
12		76	80	74
13		76	83	—
14		78	90	76
15		74	82	74
16		78	84	74
17		76	84	74
18		73	83	74
19		74	85	75
20		76	88	75
21		76	88	76
22		76	88	79
23		79	90	81
24		81	84	82
25		82	90	80
26		80	78	74
27		74	84	76
28		75	84	79
29		78	86	79
30		74	87	75
31		76	87	78

BILLS OF MORTALITY, as observed and reported by
ISAAC BALL, M. D. Assistant in the Board of Health
 of New-York, commencing January 1st, and ending
 June 30th, 1815.

	Consumption.	Various diseases.	Total
January	43	105	148
February	46	118	164
March	49	118	167
April	65	149	214
May	66	161	227
June	60	117	177
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PLICA POLONICA, and a new Opinion concerning the GOUT.

MONS. Jacques, a writer in the Parisian Journal of Medicine, Surgery, and Pharmacy, states (December, 1814.) his reasons for believing that the plica polonica, or peculiar matting and thickening of the hair of the head, which afflicts the inhabitants of Poland, is but a modification of the gout; showing itself occasionally in the cutaneous covering of the body and its capillary excreescences, and not in the feet, stomach, and other parts usually affected.

The following, among other reasons, are urged in favour of this opinion. 1. Like the gout, the plica is frequently hereditary. 2. It manifests itself at a certain age, rarely, indeed, in infancy; sometimes at twenty-one; but in the greater number it makes its appearance between forty and sixty. 3. It seldom attacks females whose menses are regular. 4. It mostly occurs in men who are corpulent, and of a temperament in which the choleric and phlegmatic are united. 5. The gout does not torment those who labour under plica, nor does plica occur in such as are victims to the gout. 6. Analogous treatment of epispastics, when the morbid matter is repelled; or of tonics, discutients, bitters, and

diuretics, are equally celebrated in both diseases. 7. A case in point is related by M. Jury, a physician and surgeon at Plock. A gentleman from Berlin became a resident at Plock. After a few years he discovered his hair to thicken and glue together; in short, that he had the plica. But he, at the same time, found himself free from the gout. Returning to Berlin, where he was obliged to pass some time, the plica ceased spontaneously; but the gout and pains were renewed. He afterwards went back to Plock, where the plica returned, and the gout left him. The case is a recent one, having occurred within the last ten years.

Spontaneous COMBUSTION of the HUMAN BODY.

COUNSELLOR Scherf, of Dertmold, has communicated to Professor Kopp, of Hanaw, the editor of the highly respectable journal, entitled, *Annals of Political Medicine*, a case of the death of a man, by a burning process, which arose without any known or external cause.

The occurrence took place on the 17th of January, 1811, at a village in the county of Lippe. The subject was a bachelor named Ignatius Meyer, about forty-eight years of age, a valetudinarian from his earliest days. He had lately become a great drinker of brandy; which he at length took clear, and in such large quantities, that he was generally carried drunk to bed every evening.

On the night of the 16th of January he got intoxicated as usual, and at eight o'clock his nephew, a young man, sixteen years old, conveyed him to his resting place. There had been no fire in the room during the day; and the lamp which had been lighted, had been extinguished by nine. At that hour, the man lay in a profound sleep, with his clothes on, stretched on a bulk, resembling those upon which watchmen lie.

The room was not entered until towards nine o'clock the next morning, when a smoke of an unusual kind was observed to issue from the cracks of the door. Thereupon

Meyer's brother and nephew opened the chamber, and were saluted by a cloud of extremely stinking vapour. They stooped to get clear of it in some measure. They could not see the bed, which was yet smoaking. Ten or a dozen buckets of water were thrown in to repress the exhalation; then they discovered the face of Meyer, converted to coal, and covered with a crust resembling the thick shining soot of a stove-pipe. The hair of the head was totally consumed by fire. The pillow was reddened under his head; and the wooden support was carbonized on one of its sides. The carbonization of the head terminated at the point on the neck that had been covered by the bed-clothes. The parts of the body which were covered, underwent no decomposition or change. The body clothing had suffered no decomposition whatever. The bed-clothes could scarcely be said to have been injured by the fire; they were merely soiled about the place where the head lay; and on the outside with a sooty, unctuous, and greasy matter, of the consistence of tar. The only parts changed by this curious operation were those which were exposed to the open air; and these were the head, face, right hand, and great toe of the right foot. This latter happened to be out of bed, and exposed to the atmosphere through a hole in the stocking. All the naked surfaces were reduced to coal.

Various other particulars are told in the *Parisian Journal of Medicine, Surgery, &c.* for December, 1815. (vol. xxxi. p. 379.)

After relating the facts, Mr. Scherf theorizes upon them. He does not believe the fire was produced by an eructation or expiration of phosphorated hydrogenous gas. For although the charring of the face might possibly be explained in this way, it is not very evident how the fire could skip from the head to the right hand, and to the great toe of the right foot, without any invasion of the interjacent parts. This ingenious gentleman rather inclines to the opinion, that there was an idioelectrical condition of the parts, which scorched and carbonized those only that, by the absence of bed-clothes and garments, were left unprotected.

It was remarkable, that in the famous case of the countess of *Brandi*, the legs covered by stockings

were not consumed. The cap of the priest *Bertholi* was burned while the hair of his head remained unburnt. While in *Ignatius Meyer*, who slept without a cap, the hair was completely burned off.

DEMONOMANIA, or MISSIONARY Preaching in Italy.

MONS. Berthollet has presented to the Medical Society of Emulation at Paris, some observations on a case of demonomania which fell under his observation at Sessa, in the beginning of February, 1812. The subject was a married woman, who was converted from health to insanity in the following manner.

In the kingdom of Naples, the faithful have established missionary preaching, and the priests engaged in that service are called missionaries. They have their seasons of travelling from place to place, and of preaching for a prescribed time. To enliven the torpid creatures whom they address, they inforce their oratory with the most forcible and significant gestures. Thus they stretch their hands over burning torches; they whip themselves with prickly scourges; they tie and bind themselves fast with cords; and practise many other rhetorical arts. We are constrained reluctantly to admit that these exercises surpass every thing that has been done in the American camp-meetings. These animating discourses are always prolonged to the decline of the day, and are even lengthened to thirty minutes or an hour of the night. The dim glimmering of the lamps adds inexpressibly to the scene.

The preacher of one of these emphatical sermons threw the good woman who is now under consideration, into an extreme disorder of mind. He was discoursing upon *Hell*. To add expression to the frightful picture he drew of the residence of the damned, he took in one of his hands a human skull. He exhibited this death's head to his audience, and then raised a doubt as to the place which contained the soul of the person to whom the brain-case had belonged. He then addressed the skull in the following terms: "If thou art

"in paradise ! pray," &c. &c. if thou art in hell ! curse "every thing," &c. &c. and he hurled it with such violence that the poor woman was turned crazy, and remained in a state of most distressing and ferocious raving, which giving her the character of a demoniac, rendered it necessary to perform upon her the ceremony of exorcism, when she was brought to her senses on the eleventh day of her malady by the violent commotion of a clap of thunder, and thereafter recovered her health.

Partial Amputation of the HUMAN FOOT.

It does not appear that the operation of partially cutting off the foot, had been performed before the year 1791, by Mons. Chopart. This Surgeon conceived there would be great use in preserving the posterior part of the foot, and that this was practicable in certain ulcers and other diseases of the toes and metatarsus. He proposed to amputate through the joints, by a line nearly parallel to the space between the astragalus and the os scaphoides, and between the os calcis and the cuboides. He saved flaps large enough to cover the wound, and to make it heal by the first intention. And it was thought that a great point was gained by saving a portion of the foot sufficient to stand and walk upon.

The operation seems to have attracted very little notice until 1812, when Richerand noticed it in his surgical nosography, and Larrey mentioned it in his memoirs of military surgery. In his 3d volume, page 400, the latter of these writers remarks, "that he had performed several amputations of the foot, between the two rows of tarsal bones, or between the tarsus and metatarsus, and they were all completely successful."

When once the bistoury is introduced into the joints between the scaphoides and the astragalus, the operator carries it from within outwards, and when the ligaments of that part are divided, it is directed a little forwards to separate that which connects the cuboides to the calcis.

This operation of the partial amputation of the tarsus, has not been noticed either by *Lasses* or *Sabatier*.

There is no doubt, from the facts stated in the memoir upon this subject written by Dr. Villermé, and printed in the Medical Journal of Paris, for February, 1815, that this mode of amputating the foot may be performed with ease and safety. It may, however, be doubted whether it be expedient to perform it often. Experience has shown that the patients are bad walkers; that the scar is apt to break open, and inflammation to supervene. The condition of some persons who have suffered amputation at the tarsus, has even been found so inconvenient and painful, that they have submitted, for relief, to have the leg cut off at the usual place. And it may be understood as a general remark, that a man can walk much better with a wooden leg, than with such a remnant of a foot. They who possess ease, fortune, family, and friends, are almost the only ones to whom the preservation of the heel, in such cases, is a matter of any moment. Persons who wish to be active and to labour, do better to part with the whole foot at once.

In considering other chirurgical operations on the foot, Dr. Villermé relates one case where he removed from the diseased foot of a soldier, three toes, three metatarsal bones, and the three cuneiform bones, with which the two latter were articulated; and another in which the two latter metatarsal bones (the toes having been previously destroyed by a shot) were removed at their junction with the tarsus. It appears also that Larrey has cut off the foot at the articulation of the metatarsus with the tarsus. And Villermé recommends it as the preferable operation, if any thing of this sort is to be done.

The TUMOUR of an ANEURISM dispersed by a long continued Application of ICE.

A Gentleman from Louisville, (Kentucky,) lately visited New-York, who declared he had been cured of an aneurismal swelling of the shoulder, by the persevering use of ice.

He related, that in a manner inexplicable by himself,

he was seized with pain in the left side of the chest, and difficulty of breathing. The seat of the distress was behind, towards the shoulder-blade. The anxiety and torment increased gradually to an excruciating degree. He was obliged to preserve an erect posture, that he might escape the agony of lying down.

At length a pulsation was felt along the base of the scapula. This corresponded with the action of the heart and arteries. It enlarged into a tumour of considerable size, near the posterior and inferior angle of the bone. The beating in the sac was judged by all the faculty who were consulted, to be aneurismal. It grew to such magnitude, as to excite the utmost seriousness and alarm. An operation was recommended, as the only resource for him. It was thought the sac would burst in a short time, and that death would be the inevitable consequence.

The tumour was in so unusual a place, that difficulties of more than ordinary magnitude occurred. It was by no means certain what artery, or branch of an artery was the exact place of the disease, though the sub-scapularis was judged to be the seat of the mischief. To tie the carotid or the sub-clavian artery, was a serious undertaking. And to complete the embarrassment, no pressure that could be made on the subclavian, or any where else, diminished in the least, the throbbing of the tumour.

The operation was abandoned as impracticable or useless; and the patient, under a quiet and composing regimen, resigned to his fate.

In this state of discouragement, one of the gentlemen fortunately recollected the advantages, said to have resulted from the application of ice. (See our xviith vol. p. 199.) It was procured, and by means of an ox-bladder kept on the swelling night and day for many weeks. The skin soon began to shrink, and the aneurism to diminish. By perseverance in the employment of the remedy, the tumour has wholly disappeared. He no longer suffered any pain; and his respiration is as easy as before.

On the disappearance of the swelling, pain, and dyspnoea, he was well enough to mount his steed, and to

travel on horse-back over the Alleghanies to New-York. His health was sensibly improved by the exercise, without any renewal of the old symptoms, at the time of his arrival.

The first time, (July 21st, 1815,) that I examined the part which had been the seat of the malady, I discovered a pulsation along the base of the scapula, and between that and the vertebræ of the back, as if from an artery of considerable size. But he was not conscious of any disease; nor did it give him any inconvenience whatever. A few days afterwards there was an increased pulsation, and a manifest swelling near the superior angle of the scapula, with pain and throbbing. But there is a strong inducement to make further attempts to cure aneurisms, by this cheap and easy mode of refrigeration. There is also reason to expect a more circumstantial history of the case from one of the learned physicians consulted by the patient.

OPERATION for amputating the ARM at the SHOULDER.

The Medical Journal of Paris, now edited by M. Leroux, Dean of the medical faculty in that city, continues to be the vehicle of interesting intelligence. In the number for March, 1815, there is an article of a memoir read to the National Institute of France, and a report upon the same, by a committee, on the method pursued by Messrs. Lisfranc and Champesme for removing the arm at the scapulo-humeral joint.

The pamphlet on the subject was printed by Crochard, in 8vo. and is divided into two parts, the first containing a summary of the several projects for doing the business up to the time of the present operation; and the second, a description of the new method recommended by the authors.

The operation consists in introducing at once into the joint of the shoulder, the blade of a two edged knife, and to perform the work in two thirds of the time practised heretofore.

During the operation the patient is seated on the side

of his bed, or on a chair, with his head leaning on the breast of an assistant. The arm, drawn near the trunk, is kept in a state of half pronation, while the upper extremity of the humerus is turned outward and upward. The operator is placed on the inner side of the shoulder upon which he is to operate; and thereby becomes perfectly acquainted with the condition and situation of the diseased parts near the articulation. He takes the knife in his right hand if he operates on the right shoulder, and in the left hand if he operates on the left shoulder. He next places the point of the instrument in the triangular space that there is on the inside of the stump of the shoulder. This space is bounded by the scapular extremity of the clavicle, and a very small extent of the acromion within, by the coracoid apophysis, without by the head of the humerus. The blade must be directed in such a way, that its side should form an angle of about forty-five degrees, with the axis of the shoulder; that of the two edges, the upper one is inclined a little forward, and the lower one rather backward. The operator plunges the knife through the joint, so as to make it come out at a point exactly opposite the place of entrance under the acromion. He then seizes the deltoid and raises it, next cutting from which forward, and somewhat from below, upwards, he encircles the inner and upper part of the head of the bone, giving gradually to his blade an almost horizontal direction. When it has passed through an inch of extent, to facilitate the operation, the arm may be removed, if it should be thought proper, as much as fifteen or twenty degrees from the trunk; when the superior and inferior flaps may be formed very near to the insertion of the deltoid. The incision is made obliquely from within outwards, to save more skin than muscle. This being raised, the surgeon passes his knife behind the head of the humerus. This is very easy, by reason of the considerable displacement already made. The upper and lower flaps are formed by cutting along the humerus the space of about three fingers breadth. And before he finishes this flap by a perpendicular incision through the fibres of the muscles, a second assistant compresses the axillary artery between his thumb ap-

plied to the upper face of the flap, and the four fingers of the same hand fixed on the integuments. The inferior and anterior flap being finished, the artery is immediately tied.

In the first period of the operation, when the superior and posterior flap is formed, the upper part of the capsule, the tendon of the supra-spinosus, and the external tendon of the biceps are cut through; the tendons of the sub-spinosus and sub-scapularis are also divided, in a great measure, if not entirely. The flap is almost wholly formed by the deltoid muscle.

The inferior and anterior flap formed during the second stage of the operation, contains a very small part of the deltoid, pectoralis major, latissimus dorsi, rotundus major, a portion of the triceps, and of the coraco-brachialis, as well as of nerves and vessels which go to be distributed through the arm.

There are some further particulars related, of certain alterations in this mode of operating, which we do not conceive it very important to translate. They refer chiefly to the posture of the limb, and the manner of cutting. It is reported that Messrs. *Percy* and *Deschamps* have returned a favourable opinion concerning this operation, to the National Institute, as an improvement in surgery. The subject has been particularly examined by *M. Gaultier de Claubry*, in a dissertation upon the different cases rendering necessary the operation at the shoulder joint. In his judgment they are six. 1. Exostosis, with worm eaten caries external, from the middle of the bone to its neck; 2. the almost total destruction of the shoulder, with the head, neck and great part of the bone, by a cannon ball; 3. similar injury done to the parts by any compressing or crushing body, such as the wheel of a loaded waggon; 4. the extinction of life in the arm by the oblique action of a shot, when its force is almost spent, causing great destruction of the muscles, nerves, and vessels, while the skin is pretty entire; 5. a wound or aneurism of the axillary artery; 6. mortification from any cause, stopping near the articulation.

*Curious ARTICLES of INTELLIGENCE, translated from
Messrs. CHAMBERET and VILLENEUVE's Medical
Review for the Year 1814.*

Mr. YOUNG has discovered a fœtus in the abdomen of a male child, who died at the age of nine months. In this fœtus, the brain, spinal marrow, and heart were wholly wanting. (*Journal de Med.* Jan. 1815, p. 8.) (See *Medical Repository*, vol. xiii. p. 1—8.)

The *Journal de Physique* contains the description of a human skeleton found embedded in a block of calcareous stone, at the island of Guadeloupe. Although the head is entirely wanting, the remaining bones are in a sufficient state of preservation to enable a judgment to be formed that they once belonged to a man. This fact is the only well attested instance of mineralized or petrified human bones. But there is no certainty of the exact antiquity; for the age of the rocky mass and of the stratum to which it belonged, are still the subjects of geological and chronological researches. (p. 9.)

The spontaneous change of colour in an European, from white to black, has been observed by M. Chomel. The individual had been long exposed to all the effects of nakedness and misery. The consequence was a change of complexion, which, as the *Gazette de Santé* states, progressed rapidly until the skin became as completely and intensely black as that of the Negroes. (*ibid.* p. 11.)

It had been long since remarked by M. Chaussier, that when an attempt was made to inject the placenta through the umbilical arteries, the quicksilver always stopped in the placenta, and never passed into the uterus: but that if the injection was applied to the umbilical vein, it passed readily into the veins of the womb. This accurate observer is reported in the bulletin of the faculty, to have derived further proof of this fact, by a repetition of the experiment on the body of a woman who died in an advanced state of pregnancy. (*ibid.* p. 11.)

An angry or irritated dog, though not mad or rabid in the proper sense of the word, has been known to produce the hydrophobic disease by his bite, in the human species: and more than that, a child bitten by a dog whom he teased, has been known to fall into hydrophobia, and die of it, although the wounds healed up in five or six days, and the dog remained free from the smallest disease. A woman became rabid without any external wound or injury, on hearing that her husband was dead. The disease was fatal to her; but what is remarkable, a dog that was accustomed to kiss her mouth and lick her lips, took the disease, and expired mad eighteen days after his mistress. (*ibid.* 28, 29.)

M. Boyer has published, in four volumes, the first part of his treatise on Surgical Diseases, and of the Operations that appertain to them. It is reported to be the most complete system of surgery extant in the French tongue, presenting a correct and faithful view of the present state of the manual art.

M. Roux has printed his *Elements of Operative Medicine*; which may be considered as the completion of Boyer's great work.

The French consider these two performances, as the most methodical and complete display of surgical knowledge.

M. Hugon has likewise sent forth his tract on pathology. He dwells more particularly on outward remedies, and on the classification of chirurgical disorders. (p. 38.)

It has been ascertained, that the fore-finger, after having been completely separated, has been as completely restored. Three fingers of a child, aged four years and a half, were cut off, so as merely to hang by the skin; and on being properly replaced, the re-union was effected on the sixth day. (p. 38.)

The thigh-bone has been observed, by M. Beauchene, to have been broken by the action of its own muscles. This was not a case of diseased femur, but a fracture of the bone of a healthy subject. (*ibid.* p. 43.)

Spirit of turpentine, in doses from four to seven drachms, continues to be good against tænia in the intestines. Though generally serviceable, it sometimes fails. In some patients it has produced dizziness, delirium, tenesmus, and strangury. (p. 48.)

Several physicians in Sicily, Zante, and Malta, have prescribed with success powdered carbone in intermittent fevers. And M. Calvert is persuaded that it may be employed instead of Peruvian bark. The powder of carbone has been used by M. Bertrand as an antidote against the poison of arsenic and corrosive sublimate, though it must be stated that the objections of M. Bourlay go very far to lessen our confidence in the remedy as a counter poison. (p. 48.)

A strong infusion of pepper-mint has been found, by M. Astier, to cure the itch, within a fortnight. It was employed as a lotion in the military hospital of Alexandria.

A new edition of M. Foderé's great work on Medical Jurisprudence, or, as it is termed, Legal Medicine, has made its appearance at Paris, in six octavo volumes. The work, in its present state is considered the best collection extant of that important department of knowledge. A copy has very lately been received in New-York.

M. Prunelle, of Marseilles, has delivered valuable opinions on political medicine, in a discourse pronounced before the faculty.

M. Guelton-Marc, of Troyes, has published a work on public morality and legal medicine, as connected with the trial by jury. And M. Orfila, who is so zealously occupied in his general Toxicology, has published, in the first volume of that work, his history of mineral poisons. (ibid. p. 54.)

We extract from the same Journal, for February, 1815, the receipt for Besnard's famous antisiphylitic

ointment, as the same has been published at Salzburg and in other parts of Germany.

Tinctura antisyphilitica Basnardi :

Take of purified salt of Tartar,

Simple cinnamon water, each one pound ;

Purest opium, two ounces,

Cinnamon water, with wine, four ounces ;

Dissolve them separately ; then mix them together, and digest in a water bath for three weeks, stirring them frequently. Strain the composition, and then add of

Choice gum arabic two ounces,

Volatile alkaline salt, one ounce ; dissolved in six ounces of simple cinnamon water.

The mixture must then be permitted to stand in a well closed vessel for some days, and be filtered for use.

In venereal cases the author recommends a dose of twenty or twenty-four drops to an adult, in a cup of a cold decoction of Peruvian bark ; and to be diminished as the symptoms disappear. It may be employed externally for chancre.

M. Roux has amputated at the knee-joint in a case of white-swelling. This great operation, the first ever performed in Paris, and the second in France, was finished in seventeen minutes. The patient belonged to the charity hospital. (ibid. Feb.)

SURGICAL. *From the Boston Palladium, May 5.*

In the last National Intelligencer, the death of Capt. Downe, (on Lake Champlain) is said to have been occasioned by the mere passage of a cannon ball ; probably, because, upon examining his body, no external wound was discoverable. The opinion is very prevalent, that the force of the air, propelled by a cannon ball, is such as instantaneously to destroy animal life, when within its scope. But the idea is entirely erroneous. In "Bell's Discourses on Wounds," we have the following : "I have heard sensible men," says he, "of

our profession, affirm, that even the whiff and wind of a cannon ball will extinguish life—but they must have forgotten, that a man's right leg is frequently shot away, the breeches of the left thigh torn, and yet the thigh itself remain safe—an officer's leg is carried away by a shot, which does not injure his horse. The reason of all these wonderful tales about the wind of a ball is itself very wonderful; men often fall in the field of battle, and when the camp followers come to turn over their bodies, no wound, or mark of injury is seen. Now, this apparent difficulty will disappear entirely, when I inform you, that often a limb is broken, while the skin remains unhurt—and a dreadful fracture it is—where a ball strikes obliquely, it buff's along the skin, the ball is turned away, and the part struck becomes insensible in the instant; there is no feeling of the terrible accident that has happened; the patient is sensible of nothing more than a confused shock; hardly knows where he is struck, and falls down. This fracture is of the worst kind; for it is accompanied with such a bruising of the parts, that they never can be restored; and, though the skin is still entire, there is much blood extravasated, and the muscles are reduced to a gelatinous and pulpy mass, the bones are broken, and the flesh and the periosteum, are, to a great extent, torn from the bone. Let a ball hit any of the great cavities thus obliquely, and this phenomenon appears; the patient is killed, without any external wound. He is killed, according to the notion of some fellow-soldier, by the wind of some great ball. But we know, that the ball has actually struck him; that the breast, the belly, or the head, has been hurt. If the chest has been struck, then the ribs have perhaps yielded, and escaped the blow; but the lungs have suffered, and often by extravasation of blood in the chest, the lungs are suffocated; in the belly, there is often a bursting of the liver or spleen, without any outward wound of the skin; very frequently in the head, though there appears no outward injury; the pericranium is separated from the skull, or there is an effusion of blood upon the brain. Nor is this piece of knowledge entirely without its use; for extravasations of this kind have been sometimes

discovered by the pulse and breathing, and have been relieved by making incision into the belly or chest. So we see, there is no such thing as an injury, much less death, arising from the wind of a ball; but when a great ball hits a limb obliquely, it breaks the bones, without injuring the skin; and, of course, when a ball buffs along the surface of any great cavity, though the skin is left entire, the bowels within are hurt, the lungs or liver are burst, and the cavities of the abdomen, or thorax, being filled with blood, the person dies." *Bell's Discourse on Gun-shot Wounds.*

GREENLAND ICE *working to the Southward in the*
ATLANTIC OCEAN.

The natural history of the *field-ice* and the *mountain-ice*, of the Newfoundland station, was investigated very particularly, in Medical Repository, Hex. ii. vol. ii. p. 443: *ibid.* vol. iv. p. 225 and 410: and *ibid.* Hex. iii. vol. iv. (New Series, vol. i. p. 194.)

The information brought to us by navigators between North-America and the western and north-western parts of Europe, is full of memorable facts and occurrences concerning the vast and numerous bodies of floating ice.

They are connected with the remarkable backwardness of the spring, and coolness of the summer, to the latter part of June.

St. John's, Newfoundland, May 6th, 1815.

On the 29th of April, in lat. 47°, long. 46°, Capt. Major, of the schooner *Lovely Sally*, from Dartmouth, picked up Capt. Jones and crew, in the boat of the ship *Charlotte*, in all twelve persons. They had been in the boat four nights and three days, after quitting the vessel, which had foundered by striking the ice. She was from Port Glasgow, bound to Miramachi. The mate and nine men have arrived here. The master and a boy, who were frost bitten, are left at the bay of Bulls.

May 13th. On Thursday last the brig *Vigilant*, Capt. May, from Liverpool, was driven, by the ice, against the north head of this harbour, where she struck and went down.

Yesterday a schooner from Belleisle struck a piece of ice off the harbour, and foundered. Both crews were saved.

From a gentleman who arrived here on Wednesday last from Teignmouth, in the brig Reward, William Turner, master, we have received the following narrative:

On Monday, the 8th instant, at about 50 miles from the land, they descried some people on a pan of ice, and at 3 o'clock P. M. had the good fortune to take on board 15 men and 3 boys, from whom they learn, that they had sailed from Poole, in the brig Benjamin, Capt. Cribb, bound to Trinity—that the vessel had struck against a piece of ice on Sunday, about 5 o'clock, and soon filled with water—that the yawl was filled with water in lowering her down, and one man was thereby drowned—that the remainder, 53 men and boys, and one woman, went in the long-boat to a piece of ice; some of them got out, and others went and bailed out the yawl, and brought her to the ice; that they had saved from the wreck, one bag of bread, some pork, two cheeses, and some spirits, which were put into the boats. Those unfortunate men thought they were to go in the boats and share their fate equally with the rest, but, to their astonishment, the boats were shoved off, after giving them two oars, which they said were of much service to them in preventing the ice they were on from being knocked to pieces by other ice, and for making signals; this they did by putting their hats and jackets thereon, by which means they were discovered. Not a morsel of provisions was left them, or any thing to drink. They were left to the mercy of the sea on a piece of ice about 30 feet square, not more than 12 inches out of the water at the highest place, and in general so thin that it would not bear a man up some distance from the edge; a hole had appeared through the middle, which was wasting it very fast, and but for this timely assistance they must soon have perished. They stated, that the long-boat was not deep when they were all on board leaving the vessel, and might have carried all of them from the ice, independent of the yawl, which was also a fine boat. Being youngsters, they were not aware of

the intention of leaving them, until the moment arrived, when, on asking the question, they were told, to their great astonishment, that they would be called for in the morning! One of the boys was much frost bitten in the feet. They were all put on board the Nelson, belonging to the same owners, on Tuesday last.

Quebec, June 8, 1815. "The oldest inhabitant of this part of the province does not recollect a season so backward as the present. It is sufficient to give an idea of the whole to know, that on the 4th of June, the trees were not in leaf. Only the aspen and birch begin to show a little verdure."

Halifax, June 2. The ship William was wrecked in the ice on May 10, five leagues from the east point of Prince Edward's Island.

Boston, June 6th, 1815. Ship Sachem, Howland, in a passage of fifty-five days from Carlserona, met with immense quantities of ice on the east end of the Banks, in lat. 44° , and did not get clear of it for three days.

The ship Liverpool Packet was among the same ice for several days.

June 7, 1815. Arrived schooner Union, Picke, of Beverly, after a voyage of 44 days from Lisbon. On the eastern edge of the Grand Bank fell in with immense quantities of ice.

June 12. Ship William, from London for Quebec; a transport, from Cork; ship Charlotte, from Glasgow, for Miramachi; brig Vigilant, from Liverpool; a schooner from Belleisle, for St. John's, N. F. and brig Benjamin, from Pool, for Trinity, were all lately lost in the ice on the Newfoundland coast, but the crews have been principally saved.

New-York, June 21, 1815. Arrived British brig Union, twenty-two days from Windsor, Nova-Scotia, reported, that on the 20th May, vessels in the Bay of Fundy experienced a severe snow-storm, which continued from twelve at night until twelve o'clock the next day.

June 23d. A correct extract from the log book of the ship Ann Maria, commanded by Isaac Waits, bound to the port of New-York from Liverpool. 22d May. Latitude by observation 45° N. at 10 A. M. saw an island of ice on the weather bow, bearing N. W. by W. at 12 saw another. W. N. W. clear weather.

23d. Island of ice at 8 A. M. lat. 45. 47.

24th. Several islands of ice discovered this morning; at 12 meridian passed under the lee of an uncommon large mountain of ice; the ship was becalmed under the lee of it with an eight knot breeze; the height was judged to be 180 feet perpendicular.

25th. Lat. by observation 42. 47. saw several islands this day, amounting in the whole to 24; much foggy weather; winds generally westerly and northerly.

August 11, 1815. Arrived the ship *Amiable Matilda*, Captain Burnet, from Liverpool. On the 22d July saw an island of ice, about half a mile in circumference, in lat. 40°. 20'. N. and long 49°. W. Afterwards, in lat. 48°. saw another four or five times as large. Off the Shoals of Nantucket spoke the ship *Aristomenes*, from Havre de Grace, on the 5th of August, and was informed she had been as far north as lat. 50°. and had seen many ice islands, seventeen or more, some of them very large.

University of the State of New-York.

The annual lectures on the different branches of Medical Science in the College of Physicians and Surgeons will commence on the first Monday in November next, according to the following arrangements.

Anatomy, Physiology, &c. by Dr. Post.

Theory and Practice of Physic, Obstetrics, &c. by Dr. Hosack.

Chemistry and Materia Medica, by Dr. Mac Neven.

Principles and Practice of Surgery, by Dr. Mott.

Medical Jurisprudence, by Dr. Stringham.

Clinical Practice of Medicine, by Dr. Hamersley.

The Clinical Lectures are illustrated by the practice of the New-York Hospital.

The annual course of Natural History, comprehending Botany, Mineralogy, and Zoology, by Dr. Mitchill, will commence early in April, as usual. Persons who attend this class may also, if they incline, have access to Dr. Mitchill's practice and observations, during the term, as a physician of the New-York Hospital.